CIUDAD DE LONGMONT | Public Works & Natural Resources

Estado de la implementación de las recomendaciones de acción climática, 10 de setiembre

Revisión e implementación

El 25 de agosto, el Concejo revisó el Informe, recibió comentarios de distintas Juntas Asesoras de la Municipalidad sobre las recomendaciones y discutió los siguientes pasos a tomar. El Concejo pidió que el personal de la municipalidad evaluara las 27 recomendaciones usando una serie de criterios, como un análisis de la relación costo-beneficio, potencial de reducción de los gases de efecto invernadero, facilidad de implementación, y un análisis comunitario y de equidad. Los resultados se entregarán al Concejo para revisión.

Comentarios de Juntas Asesoras

A continuación, están los comentarios de las Juntas Asesoras de Sustentabilidad, Transporte, Agua, Parques y Recreación, y del Organismo de Desarrollo del Centro de Longmont, sobre las recomendaciones de acción climática.

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* Solo la primera sección del Informe está en español, pero los anexos están en inglés.

**Los comentarios de esta Junta Asesora están en inglés.

Climate Action Report Feedback

Downtown Development Authority

Recommendation		Comments
Land Use and Waste Management	LW.3) Downtown Pay for Parking	The LDDA Board has discussed the option of paid parking for years. As outlined below, there is critical data about how or when to approach this. We support the work of the Climate Action Task Force and feel that paid parking would be a long-term strategy. Our hope is that in the future, once we have adequately recovered from COVID-19 and see numbers more close to the demand listed in our parking studies, we can consider this option more closely. We have outlined some other strategies that will make paid parking an easier option – as well as encourage less driving in the short term, including more investment into infrastructure that makes alternate modes of transportation an easy option. Until there is considerable demand and toll taken on existing spaces, charging for parking too early can have a strong, negative impact on business owners. We have done two parking studies, 2016 & 2019 looking at the utilization of our parking system throughout Downtown. Right now, it hovers around 56 – 59%. Paid parking works when you hit around 80%. Those studies can be found here: 2016 - https://www.downtownlongmont.com/_files/docs/gic-parking-management-plan_final-dec-2016-(1).pdf 2019 - https://www.downtownlongmont.com/_files/docs/-final-parking-update-tech-memo(reducedforweb).pdf We still do not have adequate bike lanes, bus routes or other transit options to make lack of cars feasible. In my mind, a better strategy is an "All Trails/ Roads lead Downtown" – connecting all parts of Longmont into

		Downtown. With Downtown being the hub – you are also connecting all neighborhoods to each other. This would create a very robust alternate transportation route – for pedestrians, bikes, scooters. This could greatly reduce the demand for parking spaces – without waiting on RTD, etc. With this, a mode shift can come. To have paid parking, you would need a robust infrastructure. I am not sure that $500,000 would cover it – and that would take a very long time to pay off, even with fees and fines. Looking at some kind of shuttle / circulator could be done. But, from my experiences and talking to colleagues throughout country, these are extremely expensive and don't see the ridership anyone ever thinks it will. I urge this group to get more information. Impacts of COVID-19 and recovery will take years. One other thing – for the short term, we are using spaces on Main St. for curbside pick-up. We will monitor this as it moves forward. We are also advocating with the state to allow restaurants to extend liquor licenses and be able to use alleys, parking lots, etc. This will be very important as we navigate openings at diminished capacity, etc.
Any other comments?		

Climate Action Report Comments

Parks and Recreation Advisory Board – 8.10.2020

Recommendation		Voting	Comments
Adaptation and Resilience	AR.1) Public Health	6 Approve as written 1 Approved with noted consideration	A consideration of nature based solutions such as tree planting over hard structure solutions, would make this more complete. Air conditioning would seem to exacerbate the problem.
	AR.2) Water Conservation	7 Approved with noted consideration	The 35% reduction goal does not appear to have the data behind it to support it. How would we get to 35% reduction when Parks and Open Space is already using the most drought resistant/tolerant turf available? More research is required. Balancing act between users: city v's residential. How much would actually need to be reduced in Parks and Open Space? Asking residents to reduce water use while possibly charging more for water seems conflicting.
Land Use and Waste Management	LW.1) Extending Agricultural Zoning	2 Approve as written 5 Approved with noted consideration	Interesting concept lacking details on how it would be implemented and the different impacts.

			Idle land transition, not much for PRAB to consider as it does not address recreational land.
Transportation	T.3) Connected Bikeways	7 Approve as written Approved with noted consideration	
Any other comments?			

Climate Action Report High-Level Comments

Comments from individual board members and were not voted on by the full board.

	High-Level Comments
Climate Action Task Force	Increased protection of Open Space and adaptation strategy. Balancing Act, green islands. Further discussion on how we can balance the residents use and the city's use.
JTP Committee Equity Recommendations	
General Comments?	

Climate Action Report Feedback

Sustainability Advisory Board – 7.15.20

Recommendation		Voting	Comments
Governance		**4 Approve as written**	
Adaptation and Resilience	AR.1) Public Health	**3 Approve as written** 1 Approve with noted considerations	Do we have examples of municipalities that have similar goals that are meeting the goals? Would like to see how that is being accomplished.
	AR.2) Water Conservation	1 Approve as written **3 Approve with noted considerations**	Goal seems arbitrary, fully in support of programs that reduce water consumption, but am not sure that a 40% reduction by 2025 will create workable strategies that are well accepted and sustainable. Goal is unachievable. Will be very supportive of greywater. Very difficult to achieve with a marketplace where other cities are not making this ambitious goals. Need an educated populace that will stay put and not move to other cities. Would like to see an example of a similar City that is achieving the goal and know the techniques. Put greywater back on the table.

	AR.3) Flooding Mitigation and Preparedness Education	1 Approve as written **3 Approve with noted considerations**	No clear prioritization or framework to link all of the goals together. There are more achievable or ambitious goals for City to focus on. There is already education about flooding at parks on Resilient St. Vrain. Commercial realtors and developers should already know and have funding to educate themselves; the City should not pay for that. Matter of priority, because of the 2013 flood, already a heightened awareness of flooding. Should focus on other recommendations first. Does not seem to be on the same scale as public health and water conservation. Why is flood education listed on the same level?
Building Energy Use	BE.1) Building Codes	1 Approve as written **2 Approve with noted considerations** 1 Do not approve	Do not have problem with solar ready provisions and EnergySmart appliances. Have a problem with transitioning to electric heaters and hot water heaters. This policy has worked well in places without winters but is unrealistic here, right now. Could save similar amounts of GHG emissions with other approaches that are less expensive – like efficiency. What is the capacity of the power capacity and the impact of blocks going down because of a stressed

			grid? Does put a burden on builders. Do not approve: Do not want to transition to electric when the City is making its electricity using coal. Equity issue when requiring the consumer to go to all electric. Stress on businesses, especially small businesses. Agree with above comments as well.
	BE.2) Electrification	**3 Approve as written** 1 Approve with noted considerations	Electrification as a goal is not a fair goal when the City is still using coal. Would be more in favor, if the recommendation were more focused on considering if electrification is an option. Comment from a different Board Member: Should be looked at with context of 100% RE goal, we are 50% there.
	BE.3) Commercial Building Benchmarking	**4 Approve as written**	What are we doing to bring education to developers?
	BE.4) Commercial Efficiency and Rebates	**4 Approve as written**	
	BE.5) Increase Residential Efficiency Works™ Program Utilization	**3 Approve as written** 1 Approve with noted considerations	Need targets that are more aggressive.
	BE.6) Expand Low-Income Residential Energy Efficiency Program	**4 Approve as written**	

	BE.7) Climate Action Fund Program & Staff	**3 Approve as written** 1 Approve with noted considerations	Equity issues of mandated electrification.
Education and Outreach	EO.1) Comprehensive Workforce Development	**4 Approve as written**	Reword to assess marketplace need and market to bring people here. Need to assess a market need for the jobs. See this as Front Range Community College offering more courses on green job training. Or opportunities to transition those currently in oil and gas. If implement all of the climate action recommendations, will need more trained workers.
	EO.2) "Big Picture" Climate Lecture Series	**2 Approve as written** **2 Approve with noted considerations**	Echo chamber activities. Are not going to reach who we want to reach. Agree with the above, but it can also be done better. Concern about just focusing predominately on carbon and no other parts of climate change. Virtue signaling is not detrimental. This recommendation is positive because it targets young people in Longmont.
	EO.3) Climate Change Article Series	**3 Approve as written** 1 Approve with noted considerations	Echo chamber activities. Are not going to reach whom we are trying to reach.

	EO.4) Longmont Museum Teaching Exhibit	**3 Approve as written** 1 Approve with noted considerations	Include other topics besides just carbon.
	EO.5) Community Sustainability Liaison Program	**3 Approve as written** 1 Approve with noted considerations	Feel more positive about this because more one-on-one interaction. Do not have a problem with the idea, but do not think it will have a far reach.
Land Use and Waste Management	LW.1) Extending Agricultural Zoning	1 Approve with noted considerations **3 Do not approve**	It is a positive and useful to encourage people to grow their own food, but needs to be tied into greywater and education. Want it to be stronger and include a section on preserving farms as farms. Need to expand allowing residents to put veggies in their front yard. Do not approve comments: Not a solution to address hunger or an efficient way to address local food issues. Rather encourage local farms. This recommendation is a band-aid solution on a deeply structural problem of removing agricultural land in Longmont.
	LW.2) Commercial & Residential Composting	**3 Approve as written** 1 Approve with noted considerations	Need to start with commercial recycling before composting. 75% seems high.
	LW.3) Downtown Pay for Parking	**4 Do not approve**	Municipal parking spots for downtown employees where they can park all day.

Renewable Energy	RE.1) Smart Meters	**3 Approve as written** 1 Do not approve	Need a hardwired option. And bring in an expert to discuss local lawsuits around data security and health issues.
	RE.2) Home Energy Management Systems	**4 Approve with noted considerations**	Ways to try to save energy that require expensive equipment. Better to spend money on insulation and better windows. Agree with above. Agree with above. Expensive improvement. Agree with above.
	RE.3) Energy Savings Program	**4 Approve with noted considerations**	Ways to try to save energy that require expensive equipment. Better to spend money on insulation and better windows. Same comments as above. Notification on their phone would be useful and helpful. But needs to be simple.
	RE.4) Carbon-Intensity Signaling Protocols	**4 Approve as written**	Opportunity to get kids involved. Simple opportunity to learn.
	RE.5) Distributed Energy Resources (small scale renewable power generation & storage)	**4 Approve as written**	
Transportation	T.1) Increase effectiveness of public transit system: Checkpoint /	**4 Approve as written**	

	Flexible Bus Services		
	T.2) Electric Vehicle Charging Infrastructure	**2 Approve as written** **2 Do not approve**	Do we have that many electric cars yet? Bikeways and public transportation are better options than assuming everyone is going to afford an electric car. Hate to lose parking spots. Government does not provide gas stations so we should not provide electric charging stations. Equity issues: why are we subsidizing those who can afford electric vehicles? This is creating expensive infrastructure and it is a bad investment. Would like more research on this.
	T.3) Connected Bikeways	**4 Approve as written**	Safe, not near cars. Available to not just bikes: rollerblades, skateboards, scooters.
	T.4) Alternative Work Schedules	**4 Approve as written**	Great for wildlife and air quality.
Any other comments?		1 Board Member had this comment for all recommendations: Do we have examples of municipalities that have similar goals that are meeting the goals? Would like to see how that is being accomplished.	

Climate Action Report High-Level Comments

Comments from individual board members and were not voted on by the full board.

	High-Level Comments
JTP Committee Equity Recommendations	Great recommendations. Who will ask the questions moving forward? The community should be involved in answering

	the questions. Agree with continuing to work with the JTP Committee. Equity is always good.
Community Engagement?	Community engagement and outreach: focus on high school and junior high age Longmont residents. Focus on receptive groups. Better headlines and outreach on information included in the bill. Maybe more condensed. Reach out to faith groups more. Give restaurants and incentive to put something on a menu.
General Comments?	Can SAB see any revisions to the proposed climate action recommendations? Just Transition Plan is the reason that the Sustainability Plan is worth it and is the key that could make things work. Good job doing it in 6 months. Understand that the recommendations are initial brainstorming and found it to be comprehensive. There are good ideas.

Climate Action Report Feedback

Transportation Advisory Board – 7.13.20

Recommendation		Voting	Comments
Adaptation and Resilience	AR.2) Water Conservation	**Approve as written**	
Land Use and Waste Management	LW.3) Downtown Pay for Parking	**3 Approve as written** 2 Approve with noted considerations	Support the goal but it depends on the timeline. The impact to business owners right now is significant. Down the road would be in agreement with the recommendation, after the impacts of the pandemic have resided.
Transportation	T.1) Increase effectiveness of public transit system: Checkpoint / Flexible Bus Services	**4 Approve as written** 1 Approve with noted considerations	Does not seem like there is a solid plan for implementation. Need to factor in ADA and Call-N-Ride requirements.
	T.2) Electric Vehicle Charging Infrastructure	**5 Approve as written**	Businesses that are supporting the presence of the charging infrastructure should be part of it. The City should not pay for free charging. Twenty charging stations seems low

			(unless each charging station has multiple charging ports).
	T.3) Connected Bikeways	**5 Approve as written**	
	T.4) Alternative Work Schedules	**5 Approve as written**	If possible, would like to see this address people who live in Longmont but work elsewhere, for example, incentives/support to work from home.
Any other comments?		Questions for further consideration: • AR.2: What would this look like for landscapes? Would shutting off water to City parks and golf courses meet this goal? • LW.3: This timeline should align with T.1; Do studies from other cities address impact to low-income households and does it reduce parking; adjust timeline because of COVID • T.3: Does the timeline align with staff vision? • T.4: Has COVID impacted working from home?	

Climate Action Report Feedback

Water Board – 7.20.20

Recommendation		Voting	Comments
Adaptation and Resilience	AR.2) Water Conservation	**4 Do not approve**	The Water Board is not in support of the CATF goal because it believes the water conservation goal is unattainable within the stated timeframe without extreme impacts to the residents of Longmont and that this level of conservation is unnecessary given the design of Longmont's raw water system and existing conservation plans. In addition, the Water Board believes analysis of the environmental, economic, and social impacts of extreme conservation measures designed to reach very high levels of demand reduction would need to be determined. The Water Board is concerned about the impact of extreme conservation measures to economic development, water rates (especially for low-income households), the local environment (e.g. trees and parks), local agriculture (e.g. large scale and residential scale), downstream water rights, return flows, and the overall quality of life for Longmont residents. The Water Board supports evaluating increased water conservation levels beyond current planning levels and has been in support of the Water Efficiency Master Plan and Drought Management Plan that has prepared the community for drought in the past. The City of Longmont has a history of reliable water supply; and since the passing of the first water conservation plan in 1996, has decreased water usage even as the population has increased. During the 2002 drought, the City stayed within a Level 1 drought

			response until August of that year and only went to a Level 2 drought response for a short time. Conversely, other cities had much more serious shortages based upon different water supplies. The City also has already factored in the impacts of climate change into future water supply planning and is basing its water programs to meet future uncertainty and drought. Evaluation of a more ambitious water conservation and drought response goal, if necessary, will require the City to perform an extensive technical analysis and public input process. This analysis should focus on the impacts of future drought and the environmental, social equity, quality of life, and economic impacts of different proposed solutions. If City Council votes to pursue a more ambitious water conservation goal, Water Board proposes that staff complete an analysis within 12-18 months of City Council direction. Until then, the City should follow the goals stated in the Water Efficiency Master Plan and Water Supply and Drought Management Plan.
Any other comments?			

Informe de Recomendaciones de Acción Climática

CIUDAD DE
LONGMONT
COLORADO

Junio 2020

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Carta para el Concejo Municipal

18 de junio, 2020

Estimado Concejo Municipal de Longmont:

El año pasado, Colorado registró la temperatura más alta de su historia (115 grados el 20 de julio). Un año después, se espera que el 2020 sea uno de los años más calurosos de la historia local y mundial. Debido a la seriedad de esta emergencia, el **Grupo de Trabajo de Acción Climática** de la Municipalidad tiene al agrado de entregarles un informe que representa seis meses de arduo trabajo. Como se solicitó, el informe contiene recomendaciones para que la ciudad tome acciones inmediatas en el futuro y enfrente el problema de nuestro deteriorado clima, antes que sea demasiado tarde. Existe una variedad de recomendaciones específicas. Todas apuntan en la misma dirección, y creemos que son prácticas y realistas. Esperamos que sirvan de ayuda al Concejo para que tome acciones rápidamente.

Nuestro Grupo de Trabajo es amplio y diverso, y hemos aprendido los unos de los otros. Venimos con la sólida convicción de que los constantes esfuerzos de Longmont ya están dando frutos, y que los retos venideros pueden superarse a través del trabajo en equipo. Mientras investigábamos y deliberábamos para dar recomendaciones viables, tres aspectos fortalecieron nuestras reflexiones. Primero, el compromiso constante de los facilitadores y del personal de la Municipalidad, ha sido invaluable. Segundo, nos agradó escuchar los comentarios de la población en cuanto al trabajo de difusión del personal de la Municipalidad y del Instituto del Ambiente Físico. Nuestro informe incluye detalles del trabajo de difusión y del cuestionario de acción climática.

Tercero, el Comité del Plan de Transición Energética Justa (JTPC por sus siglas en inglés) brindó información incalculable. Estamos muy agradecidos con el JTPC por su participación y cooperación; agudizaron nuestra atención en cuanto a la necesidad imperante de abordar la equidad climática. Para crear más conciencia, hemos incluido sus recomendaciones sobre la importancia de integrar la equidad en las acciones climáticas. Este aspecto es fundamental para el reporte, de muchas maneras. Trabajar con el JTPC, ha reforzado nuestra idea de que la mitigación del cambio climático debe ser vista desde una “perspectiva de equidad”, para que las comunidades desfavorecidas contribuyan con los cambios positivos, y al mismo tiempo, salgan beneficiados, en vez de ser ignorados o castigados. También, las empresas de la ciudad se han visto fuertemente afectadas por la actual epidemia. Urgimos a la Municipalidad que haga lo posible para que no se sientan abrumados o excluidos al tomar acciones referentes al cambio climático.

Cuando empezamos a trabajar en enero, nadie se imaginó que nuestros esfuerzos se verían interrumpidos por el brote del nuevo coronavirus. Toda la población sintió sus efectos nefastos, y el Grupo de Trabajo no fue la excepción. Aun así, redoblamos los esfuerzos. Después de todo, cuando la epidemia pase, el problema persistente del cambio climático mundial todavía estará mirándonos cara a cara. El tiempo no se detiene, pero al menos, el dilema de la epidemia, nos ha dejado buenas lecciones. *En momentos de crisis, es mejor tomar acciones inmediatas y coordinadas, incluso si implican retos a corto plazo. También, algunos sectores sufren más que otros; por eso, es importantísimo balancear las cargas y beneficios de forma equitativa. La acción local conjunta es crucial, incluso si el problema es mundial. El planeamiento basado en las opiniones de la comunidad y en la ciencia, es crucial para el éxito a largo plazo.* Ahora es el momento de poner en práctica lo aprendido.

Agradecemos al Concejo por darnos la oportunidad de colaborar en este enorme reto, y esperamos poder avanzar hacia un futuro donde el medioambiente sea más sano y más sustentable.

Sinceramente, todos los miembros del **Grupo de Trabajo de Acción Climática** del Concejo Municipal de Longmont.

Resumen ejecutivo

Resumen de la Resolución Climática

El 8 de octubre de 2019, el Concejo Municipal de Longmont aprobó una resolución que declara la intención de tomar acciones inmediatas para enfrentar la crisis climática en nuestra ciudad. La resolución fue creada por la comunidad y aprobada por voto unánime. La resolución no solo exhorta a la Municipalidad, sino también, a la población a tomar acciones contra el cambio climático. La resolución concuerda con los objetivos y estrategias del Plan de Sustentabilidad, y con la resolución aprobada por el Concejo en el 2018 sobre el suministro de energía 100% renovable para el año 2030.
La Resolución de la Emergencia Climática motivó la creación de un grupo de trabajo (conocido como el Grupo de Trabajo de Acción Climática) compuesto por personal de la Municipalidad, expertos en el tema, socios, vecinos involucrados, incluyendo a los más afectados por los impactos del cambio climático. Creado en diciembre de 2019, el Grupo de Trabajo tuvo la tarea de desarrollar y entregar un informe al Concejo Municipal dentro de los 120 días de su primera reunión; este debía describir las medidas que la Municipalidad debe tomar para promover una ciudad sustentable y sin carbono. Debido al brote del nuevo coronavirus, la fecha de entrega se cambió para el 8 de abril.

Temas de acción climática & formato para las recomendaciones

El Grupo de Trabajo identificó seis temas donde centrar sus recomendaciones sobre acción climática; este informe incluye un total de 28 recomendaciones. Los temas son:

- Adaptación y resiliencia
- Uso de energía en las edificaciones
- Educación y difusión
- Uso de suelos y manejo de desechos
- Energía renovable
- Transporte

Además, el Grupo de Trabajo se dio cuenta que la equidad era un componente fundamental del proceso, y determinó que, en vez que sea un tema por separado con recomendaciones específicas; debería integrarse en todas las recomendaciones.

Para cada tema, el Grupo de Trabajo creó los siguientes criterios:

- Meta/Objetivo – el resultado deseado de la recomendación.
- Resumen de la recomendación.
- Medición – cómo medir el progreso hacia la meta/objetivo.
- Viabilidad – condiciones, habilidades y recursos realistas para alcanzar la meta.
- Relevancia – orientar la meta hacia la mitigación y adaptación ante el cambio climático.
- Marco de tiempo – línea de tiempo y logros importantes para alcanzar la meta.

- Impacto socioeconómico – quien se vería afectado y cómo (beneficios, impedimentos, resultados negativos), incluyendo sugerencias de cómo mitigar posibles resultados negativos.

Con esta información, se creó un resumen de Metas SMART (ver Glosario) para cada recomendación, y así brindar una descripción de alto nivel (ver Recomendaciones por Tema).

El Grupo de Trabajo discutió varias opciones para asegurarse que la implementación de estas recomendaciones, se gestione de manera responsable y supervisada. El Grupo de Trabajo decidió que este tema debería tocarse en la Junta Asesora de Sustentabilidad, y que deberían formarse grupo técnicos de voluntarios ad-hoc para supervisar la implementación de recomendaciones específicas. Además, el Grupo de Trabajo sugiere agregar las recomendaciones de acción climática en el Plan de Trabajo del Concejo (ver Gestión para más información).

Equidad & el Plan de Transición Energética Justa

Además de crear un Grupo de Trabajo, la Municipalidad formó un Comité del Plan de Transición Energética Justa (JTPC por sus siglas en inglés) para que se centre, específicamente, en la integración y evaluación de la equidad en los esfuerzos de acción climática. El JTPC también se reunió, al igual que el Grupo de Trabajo. El JTPC creó 1) una definición de equidad climática, 2) una herramienta de análisis de la equidad para evaluar las recomendaciones climáticas, y 3) una serie de recomendaciones para seguir integrando la equidad en futuras acciones climáticas.

El JTPC se creó como resultado del compromiso que tiene la Municipalidad con el suministro de energía 100% renovable para el año 2030, por Resolución 2018-05. La Resolución declara, en cuanto a la transición a la energía 100% renovable, que “es de suma importancia ser responsable con la economía, para que Longmont pueda seguir brindando energía asequible a la población más vulnerable, con ingresos fijos, incluyendo a los ancianos y a las familias trabajadoras,” y que la Municipalidad “deberá tomar en cuenta las necesidades de la población de bajos ingresos y ayudar a minimizar los impactos del cambio de precio de la energía.”

Además, el informe del 2018 de la Municipalidad sobre los gases de efecto invernadero, identificó un Plan de Transición Energética Justa como una de las principales estrategias para lograr sus metas de reducción de gases de forma equitativa. El objetivo del JTPC se amplió para incluir la acción climática equitativa, luego de aprobarse la Resolución de Emergencia Climática, que afirma, “las comunidades que se ven más afectadas, siempre han soportado una injusticia ambiental a lo largo de la historia, incluyendo el deterioro creado por los combustibles fósiles; y se reconoce que estas comunidades deben participar activamente en el planeamiento, toma de decisiones e implementación de las acciones climáticas.”

El desarrollo del JTP empezó en el 2018. Desde entonces, la Municipalidad decidió que, en vez de crear un plan por separado, sería más efectivo incluir la equidad y la justicia en otros planes municipales. El

JTPC y el Grupo de Trabajo decidieron incluir el informe del JTPC en el reporte de Recomendaciones de Acción Climática.

Participación comunitaria & cuestionario

La Municipalidad realizó un trabajo de difusión con el objetivo de involucrar e informar a la población sobre la Resolución de Emergencia Climática, y sobre posibles acciones climáticas. El trabajo incluyó presentaciones y conversaciones con diferentes sectores de la comunidad, muestra de afiches en el Centro Cívico, la biblioteca y en el edificio St. Vrain Memorial. También se distribuyeron cuestionarios en eventos, afiches y en listas de distribución de correos electrónicos. Un total de 352 personas y 20 empresas respondieron el cuestionario. Los resultados se compartieron con el Grupo de Trabajo para ayudarles a elaborar sus recomendaciones.

Aunque se trató de llegar a más personas, empresas y organizaciones; el proceso de participación se vio bastante interrumpido por la epidemia. La Municipalidad recomienda que este proceso, especialmente, el de involucrar a las comunidades más afectadas y a los negocios (ver Glosario), se reinicie al finalizar la implementación de las recomendaciones del Grupo de Trabajo.

Proceso del Grupo de Trabajo de Acción Climática

Composición del Grupo de Trabajo

Luego de que la Resolución de la emergencia climática fuera aprobada por voto unánime del 8 de octubre de 2019, donde se declara la intención de Longmont por tomar medidas inmediatas para abordar la crisis climática; la Municipalidad propuso la formación de un Grupo de Trabajo de Acción Climática que cumpliera con las características establecidas en la Resolución. En su sesión del 5 de octubre de 2019, el Concejo Municipal aprobó su composición:

- Un miembro del Concejo Municipal
- Tres trabajadores de la Municipalidad (de los departamentos de Sustentabilidad, Longmont Energía & Comunicaciones, y Planeamiento).
- Ocho habitantes de Longmont
- Cuatro socios comunitarios del sector
    - Empresarial, educativo, de vivienda asequible, y de organizaciones sin fines de lucro/servicios humanos.
- Dos asesores técnicos (sin derecho a voto):
    - Platte River Power Authority (río Platte) y Transición Justa /justicia climática

Formación del Grupo de Trabajo de Acción Climática

El Concejo Municipal estableció un comité de selección formado por Lisa Knoblauch – Jefa del Programa de Sustentabilidad, David Hornbacher – Director de Servicios Eléctricos, y Marcia Martin - Concejal, para que crearan un formulario de solicitud, revisaran las aplicaciones y recomendaran a los candidatos para aprobación del Concejo.

El Comité de selección creo una evaluación para conocer la experiencia de los candidatos que beneficie el propósito del Grupo.

La Municipalidad recibió 53 solicitudes. Luego de revisarlas, el comité de selección decidió ampliar la participación a 10 miembros, en vez de 8, para tener una mayor gama de experiencias necesarias en el Grupo de Trabajo, y determinar efectivamente estrategias y recomendaciones. La Municipalidad también consideró necesario incluir dos trabajadores del Departamento de Planeamiento y Desarrollo, es decir, edificaciones y transporte.

El 3 de diciembre de 2019, el Concejo aprobó a los siguientes candidatos para ser miembros del Grupo de Trabajo de Acción Climática:

- Un Concejal: Marcia Martin
- Cuatro representantes de la Municipalidad
    - Sustentabilidad: Lisa Knoblauch
    - Longmont Energía y Comunicaciones: Anne Lutz

    - Planeamiento: Blas Hernandez y Phil Greenwald
- Diez habitantes de Longmont
    - Karen Dike; Alessandro Franchin; Diana Gonzales; Thomas Gregg; Tyler Jones; Michelle Mendieta; Lynette McClain; Silvana Munro; Amy Schmidt; y Peter Wood.
- Cuatro socios comunitarios de los sectores
    - Empresarial: Del Rae Heiser, LDDA
    - Educativo: Laurel Mattrey, SVVSD
    - De vivienda asequible: Ocean Fredriksen, Boulder County Housing Authority
    - De organizaciones sin fines de lucro/servicios humanos: Joni Lynch, OUR Center
- Dos asesores técnicos (sin derecho a voto):
    - Platte River Power Authority (río Platte): Andy Butcher
    - Transición Justa/justicia climática: por determinar

El Concejo también aprobó contratar servicios de consultoría para facilitar el proceso de participación del Grupo de Trabajo y del Comité de Transición Energética Justa.

Luego de la reunión del 3 de diciembre, Magnolia Landa-Posas aceptó tomar el puesto de asesora técnica en la Transición Justa/justicia climática. Más adelante, Diana Gonzales informó que ya no podría participar, y Laurel Mattrey dejó su puesto del distrito escolar, poco después de que el Grupo de Trabajo se reuniera. Jessica Pearson tomó el puesto en el distrito escolar, y en el Grupo de Trabajo a inicios de abril, 2020.

Resumen de las reuniones del Grupo de Trabajo

El Grupo de Trabajo se reunió por primera vez el 18 de diciembre de 2019. Ese día, determinaron las fechas de las reuniones de los próximos 4 meses, e identificaron seis áreas de trabajo para las recomendaciones de acción climática: adaptación y resiliencia, uso de energía en las edificaciones, educación y difusión, uso de suelos y manejo de desechos, energía renovable y transporte. Pusieron más atención en las áreas de uso de energía en las edificaciones, energía renovable y transporte ya que estos sectores producen más gases de efecto invernadero.

Formaron subgrupos por tema para refinar las recomendaciones usando modelos por área y un modelo de metas inteligentes o SMART (Anexo A: Documentos guía). La Municipalidad brindó información existente sobre esfuerzos similares, otros recursos (Recursos), e información técnica. Una vez que el Grupo de Trabajo esbozó sus recomendaciones en los tres primeros temas, pasaron a desarrollar las recomendaciones en las áreas de adaptación y resiliencia, educación y difusión, y uso de tierras y manejo de desechos.

Los miembros del Grupo de Trabajo revisaron las recomendaciones y dieron su opinión a los grupos. En la reunión del 27 de febrero de 2020, los miembros discutieron y revisaron cada recomendación de las áreas de uso de energía en las edificaciones, energía renovable, y transporte, y votaron sobre si las incluirían en el informe de recomendaciones de acción climática (Informe de Recomendaciones). En la reunión del 01 de junio de 2020, se usó el mismo proceso para las áreas de adaptación y resiliencia, educación y difusión, uso de suelos y manejo de desechos. Las agendas y resúmenes de todas las

reuniones se encuentran en la página web de la Municipalidad at www.longmontcolorado.gov/sustainability, bajo el nombre de “Grupo de Trabajo de Acción Climática.”

Una de las reuniones presenciales del Grupo de Trabajo fue hecha en conjunto con el JTPC, el 4 de marzo de 2020. Se discutieron las formas de incluir la equidad en las recomendaciones de acción climática. El JTPC creó una definición de equidad climática (ver Importancia de la equidad) y una herramienta de evaluación de la equidad (ver Perspectiva de equidad) que sirvió como base para la conversación. Los grupos analizaron cuatro posibles recomendaciones climáticas, con la finalidad de hacerlas más asequibles para la población. El Grupo de Trabajo recibió un resumen de la reunión conjunta, para revisar los comentarios que hizo el JTPC. Las recomendaciones del JTPC se encuentran en el informe de Recomendaciones de Equidad.

El Grupo de Trabajo se reunió un total de ocho veces. Seis entre el 18 de diciembre de 2019, y el 4 de marzo de 2020. En esta época, empezó el brote del coronavirus, provocando el cierre de oficinas municipales y la prohibición de reuniones presenciales hasta fines de mayo. Entonces, la Municipalidad tuvo que comunicarse virtualmente con el Grupo de Trabajo y con los consultores del Instituto de ambiente Físico (IBE por sus siglas en inglés) para completar sus recomendaciones. Las reuniones se reanudaron en junio de 2020.

Antes de la última reunión, el 11 de junio de 2020, el Grupo de Trabajo tuvo la oportunidad de dar una revisión final a las recomendaciones y comentarios, del grupo y del personal de la Municipalidad. Los subgrupos terminaron sus recomendaciones y el informe completo fue entregado al Grupo de Trabajo para su revisión y aprobación el 11 de junio. El Grupo de Trabajo completó el Informe de Recomendaciones el 18 de junio y se lo envió al personal de la Municipalidad, para que se lo enviara al Concejo Municipal.

Acción climática equitativa

Importancia de la equidad

La base del Programa de Sustentabilidad de Longmont, siempre ha sido incluir la equidad dentro de la sustentabilidad. Durante el planeamiento del Plan de Sustentabilidad, se llevó a cabo un amplio proceso de participación comunitaria, para comprender el trabajo ya existente y las necesidades referentes a la sustentabilidad. Varias prioridades estaban relacionadas con las viviendas asequibles y otros gastos de alojamiento, uso de recursos, un ambiente saludable y seguro, y una participación comunitaria significativa. Con esta información, y aplicando las mejores prácticas del campo de la sustentabilidad, el Programa se asegura de que la equidad siempre se incluya en programas, proyectos y políticas, al igual que la salud ambiental y la vitalidad económica. El Departamento de Sustentabilidad trabaja de la mano con el Departamento de Servicios Comunitarios, en especial con el área de Recursos Comunitarios y Vecinales, para promover la equidad y construir una comunidad resiliente a largo plazo con los esfuerzos de sustentabilidad. Este tipo de colaboración, ha sido crucial para tratar de alcanzar la visión del Plan de Sustentabilidad: *ser una comunidad que promueva la protección del medioambiente, la vitalidad economía y la equidad social, a fin de construir un futuro sustentable y próspero para todos.*

Basándose en esto, la Resolución R-2019-105 de la Emergencia Climática, declara lo siguiente:

"TENIENDO EN CUENTA QUE, en los Estados Unidos, las comunidades más vulnerables siempre han soportado los impactos de la injusticia ambiental a lo largo de la historia, incluyendo el deterioro creado por los combustibles fósiles; hay que reconocer que estas comunidades deben participar activamente en el planeamiento, toma de decisiones e implementación de las acciones climáticas, y deben beneficiarse igualmente de la transición justa a una economía sustentable y equitativa."

Diferentes ciudades de los Estados Unidos se han visto beneficiadas cuando se logra que las comunidades vulnerables participen estratégicamente en las acciones climáticas y en el trabajo de sustentabilidad. Las ciudades de Providencia en Rhode Island, San Diego en California, y Detroit en Michigan, son solo algunos ejemplos de ciudades que están incluyendo la justicia ambiental y la equidad dentro de sus planes de acción, para poder implementar las acciones climáticas.

En su primera reunión, el Grupo de Trabajo estableció que la equidad es un componente clave para crear las recomendaciones de acción climática, y debería incluirse en todas las recomendaciones del informe. Para lograrlo, el Grupo de Trabajo:

1. Incluyó a "la equidad" como un componente del Modelo de Áreas de Enfoque (ver Anexo A: Documentos Guía). El modelo sirvió de ayuda para que cada subgrupo identifique las acciones que tienen mayores impactos climáticos y de equidad.
2. Recibió sugerencias de la población sobre las recomendaciones propuestas (ver Participación y Opinión Comunitaria). El proceso se vio interrumpido por la epidemia.
3. Se reunió con el JTPC para informarse más sobre la importancia de las acciones climáticas equitativas y cómo usar la nocion de equidad en sus recomendaciones.

El resumen de la "Cuarta Evaluación Climática Nacional" afirma que, "las [p]ersonas que ya son vulnerables, como las familias de bajos ingresos y otros sectores marginados, tienen una menor capacidad para prepararse y enfrentar las temperaturas extremas y los impactos del clima."[1]

En Longmont, ya existen sectores que tienen menos capacidad de satisfacer sus necesidades. En el 2019, se distribuyó una encuesta del Plan de Transición Energética Justa, a hogares con ingresos menores de $50,000 al año. Se descubrió que un 54% de los participantes mantenía su casa con una temperatura incómoda para poder costear su cuenta de servicios (ver Encuesta y Conversaciones Comunitarias del Plan de Transición Energética Justa). Por esto es importante que las comunidades vulnerables se involucren en proceso, para poder implementar acciones climáticas que no perjudiquen su economía.

Comité del Plan de Transición Energética Justa

Durante el proceso de planeamiento de la acción climática, los sectores más vulnerables participaron a través del Comité del Plan de Transición Energética Justa (JTPC por sus siglas en inglés). El Comité está formado por ocho habitantes de Longmont y tres representantes de la Municipalidad.

- Habitantes: Garrett Chappell; Osvaldo Jane Gómez; Erick Prieto; Iris J Prieto; Alma Martinez Elli Newton; Andy Read; Rachel Zelaya.
- Representantes de la Municipalidad:
    - Recursos Comunitarios y Vecinales: Carmen Ramirez
    - Longmont Electricidad & Comunicaciones: Anne Lutz
    - Sustentabillidad: Francie Jaffe

Los candidatos fueron elegidos en base a su pasión por la equidad y la acción climática, y por su relación con los sectores más perjudicados de Longmont. El principal objetivo del comité fue dar recomendaciones complementarias para las acciones climáticas, y así maximizar los beneficios y reducir los impactos negativos para la población.

Al igual que el Grupo de Trabajo, el JTPC también se reunió ocho veces, incluyendo una reunión conjunta con el Grupo de Trabajo donde crearon:

1) Una definición de acción climática equitativa:
    a. *Acción climática equitativa son políticas locales y hábitos personales que reducen la contaminación del medioambiente, aumentan la resiliencia de la comunidad sin perjudicarla, y apoyan a la comunidad según sus necesidades.*[2]
2) Una perspectiva de equidad que pueda aplicarse a las recomendaciones climáticas; y
3) Una serie de recomendaciones sobre cómo integrar la equidad en las acciones climáticas.

[1] Programa de Investigación de los Estados Unidos sobre el Cambio Global (2018). Cuarta evaluación climática nacional, Volumen II: impactos, riesgos y adaptación en los Estados Unidos.

[2] Comité del Plan de Transición Energética Justa, 2020

Las recomendaciones climáticas equitativas del JTPC están incluidas en la sección del mismo nombre en este informe. Para más información sobre el JTPC, resultados y recomendaciones, vaya al Anexo C: Informe del Comité JTP.

Las comunidades vulnerables deben continuar participando activamente en el proceso de planeamiento y toma de decisiones, para asegurarse que la equidad sea implementada en las recomendaciones del Grupo de Trabajo.

Recomendaciones por tema

A continuación, se encuentran los resúmenes de cada recomendación por tema. Para leer la recomendación completa, ver Anexo B: Recomendaciones completas de Grupo de Trabajo de Acción Climática.

Adaptación y Resiliencia

AR.1) Salud pública	**Crear una coalición entre el Departamento de Salud Pública del condado de Boulder y el Departamento de Salud y Medioambiente de Colorado, a fin de construir un plan de adaptación climática y salud para enero de 2022 o antes, basados en la línea de tiempo de la pandemia COVID-19.** La coalición debe identificar problemas y soluciones relativas al calentamiento climático, centrándose en las necesidades de las personas de bajos recursos y sin hogar. Los temas pueden incluir olas de calor, casos de temperaturas extremas, problemas con la calidad del aire y cómo detectarlos, monitoreo y tratamiento de enfermedades.
AR.2) Conservación del agua	**Crear nuevos programas e iniciativas para reducir el consumo de agua en un 35%- 40%, que sea menor comparado con el consumo del 2019, para el 2025.** Prepararse para posibles sequías permanentes, cambios de temperatura y en lluvias, usando políticas, proyectos de demostración, educación directa, recursos residenciales y comerciales para reducir el consumo de agua en interiores y exteriores.
AR.3) Mitigación y preparación ante inundaciones	**Mejorar la preparación ante inundaciones a través de una campaña de concientización a inicios del 2021.** Lanzar una campaña de educación y difusión, residencial y para agentes inmobiliarios comerciales, para informar a la población sobre los peligros de las inundaciones y el valor de invertir en proyectos para mitigarlas. La campaña puede hacerse en persona, con volantes, por correo a domicilio, y otros medios de comunicación. La campaña podría incluir la Semana de Concientización sobre Inundaciones, con artículos publicados en diferentes medios de comunicación, en la biblioteca y otros centros públicos.

Uso de energía en las edificaciones

BE.1) Códigos de edificación	**Ampliar la adopción del Código Internacional de Conservación de Energía (IECC por sus siglas en inglés), agregando 1) normas para energía solar, 2)**

	electrodomésticos calificados como EnergyStar y 3) calefacción y calderas eléctricas para fines del 2022. Los códigos de energía son una manera efectiva en que las ciudades y gobiernos reducen las emisiones de carbono, eliminan el desperdicio de energía, mejoran la comodidad y la salud de los usuarios de las edificaciones, e incrementan la capacidad a largo plazo de poder pagar una vivienda, ya que los gastos de electricidad disminuyen para los propietarios e inquilinos. En diciembre de 2019, los resultados de la votación sobre los códigos IECC del 2021 aprobaron las propuestas de lograr un 10% o más en mejoras de ahorro de energía en edificios residenciales y comerciales en todo el país.
BE.2) Electrificación	**Crear un comité de ocho miembros que investigue la viabilidad del proceso de electrificación, y que, en seis meses, 1ro de noviembre de 2021, tenga una idea de las fases necesarias para implementar un plan de electrificación.** La electrificación estratégica contribuye con el desarrollo económico de las comunidades, brinda mejores opciones de transporte y de tecnologías innovadoras en una gran variedad de infraestructuras y servicios. El alcance de la investigación podría incluir todos los beneficios de la electrificación aplicados a temas mencionados aquí: energía renovable, transporte, uso de energía en edificaciones y desarrollo de la fuerza laboral. El plan incluirá objetivos a mediano plazo (terminado para el 2025) y largo plazo (terminado para el 2030), y tendrá que hacer hincapié en temas de equidad y justicia.
BE.3) Análisis comparativo comercial	**Implementar un programa de análisis comparativo para edificios comerciales para el 2022, y así animar a los propietarios y arrendatarios a mejorar el ahorro de energía y reducir su consumo en un 7% para el 2025.** Un análisis comparativo significa medir el uso de energía de un edificio en el periodo de un año, y luego comparar esas cantidades con las de edificios similares, a nivel local y nacional. Incluye el análisis de todas las fuentes y tipos de energía. Existen varios programas de comparación, como CBECS, ENERGY STAR, entre otros. Para identificar el programa adecuado, se necesitará que los propietarios y arrendatarios locales den su opinión.
BE.4) Descuentos y ahorro de energía comercial	**Expandir el programa comercial *EfficiencyWorks* para lograr un ahorro de energía del 2% por año para el 2025 (actualmente 1% por año).**

	Los descuentos ayudarán a aliviar los costos de las mejoras de energía en edificios comerciales pequeños, medianos y grandes. Las mejoras incluirían sistemas de luz, de enfriamiento, revestimiento, controladores de frecuencias variables, construcciones nuevas e inspecciones. Los descuentos vendrán del programa de ahorro de energía regional EfficiencyWorks, y PRPA procesará la administración y contratos.
BE.5) Aumentar el uso del programa residencial *EfficiencyWorks*	**Expandir las auditorías residenciales de *EfficiencyWorks* de 100 a 400 hogares anuales para el 2023 y agregar informes residenciales para el 2021.** Los descuentos residenciales ayudarán con el costo de las mejoras de ahorro de energía, pues reducirán el precio de las facturas y la emisión de gases invernadero. Los informes de energía residencial harán que las familias se animen a participar en la auditoría. La expansión del programa incluiría la coordinación con proveedores de servicios y amplia publicidad.
BE.6) Ampliar el uso del programa de ahorro de energía para hogares de bajos ingresos	**Incrementar la participación anual de 40 a 400 viviendas unifamiliares de bajos ingresos para el 2025** La ampliación del programa consideraría la participación de todos los hogares de bajos ingresos. Para que estas casas ahorren más energía, aumente la participación y se reciba más financiamiento, se brindarían auditorías gratuitas de energía, aislamiento, hermetismo, calentadores ahorradores (si fueran inseguros) y refrigeradores (si fueran antiguos).
BE.7) Fondo de acción climática y de trabajadores	**Crear un fondo de ayuda para los dueños de edificios residenciales y comerciales que perciban bajos y medianos ingresos, y así cumplir con los objetivos de electrificación y energía renovable de la Municipalidad para la primavera del 2021.** Para que todas estas medidas sean exitosas, es necesario que las personas, negocios y familias no tengan cargas económicas excesivas. Este fondo podría participar en programas públicos y privados, como C-PACE. El fondo se establecería por una mezcla de recursos públicos y privados, así como comisiones e impuestos, y la Municipalidad debería invertir ese dinero para crear más ingresos.

Educación y difusión

EO.1) Desarrollo integral de la fuerza laboral	**Desarrollar entrenamientos para trabajos ecológicos que resulten en una fuerza laboral diversificada que contribuya con las metas climáticas de la ciudad para el 2023.** El desarrollo de la fuerza laboral será crucial para el éxito de las recomendaciones. El programa se enfocaría en ofrecer entrenamientos e incentivos en el sector público y privado para ampliar la fuerza de trabajo en las

	acciones climáticas. El programa se establecería en los próximos 3 años, desarrollando un Concejo de Empleadores Ecológicos (GBEC por sus siglas en inglés) para el 2020 que administre el programa. El programa tendrá tres objetivos, 1) ofrecer ascensos profesionales, empleo estable y sueldos dignos, 2) aumentar la cantidad de profesionales ecológicos, y 3) construir una fuerza aboral diversa.
EO.2) Serie de conversaciones climáticas "Big Picture"	**Desarrollar una serie de conversaciones climáticas que empiece a inicios del 2021 y dure hasta el 2025.** Para abordar el cambio climático, es necesario tener un público informado. La comunidad debe entender el problema para que las acciones climáticas sean exitosas. También hay que tener un profundo conocimiento histórico y cultural. El objetivo de las conversaciones es promover la concientización y la discusión entre un público de todas las edades. La serie de conversaciones titulada "*Our Climate—The Big Picture*", ofrecerá cinco presentaciones y discusiones gratuitas en el Museo de Longmont, los domingos por la tarde. Con el tiempo, el programa actualizará temas y datos científicos, y podría asociarse con las escuelas para que los estudiantes recopilen información de sus departamentos de ciencia.
EO.3) Artículos sobre el cambio climático	**Publicar una serie de 10 a 12 artículos para la primavera 2021, donde se resalten hechos históricos junto con datos climáticos actuales.** Publicar ensayos sobre historia y ciencia, serán útiles para que la población de Longmont reflexione sobre la actual emergencia climática en un contexto más amplio. Hará que temas abstractos, sean más entendibles al relacionarlos con cambios específicos en el uso de energía en nuestra área, a lo largo del tiempo. Se explicará el gráfico en "forma de J" para mostrar cómo el consumo de energía, por parte los humanos en todo el mundo, ha cambiado con el tiempo.
EO.4) Exposición educativa en el Museo de Longmont	**Resaltar y mejorar la exposición "Front Range Rising" del Museo de Longmont para incorporar más ideas de sustentabilidad en el 2022.** A fin de no crear más herramientas caras para la enseñanza sobre el cambio climático, hay que usar los recursos ya existentes, como la pequeña, pero excelente exposición "Front Range Rising," del Museo de Longmont. Esta recomendación sirve para resaltar recursos ya existentes, ofreciendo experiencias interactivas sobre lecciones de sustentabilidad del pasado, y enfatizando soluciones científicas y técnicas del presente.
EO.5) Programa de promotores de sustentabilidad	**Establecer un programa de promotores de sustentabilidad hacia finales del 2020.** Identificar y brindar recursos a promotores que se han ganado la confianza de la comunidad, para que la eduquen sobre la sustentabilidad, energía renovable, y otros temas importantes para enfrentar la emergencia climática. Estos

	promotores informaran a la población sobre los programas que ofrece la ciudad, los beneficios de la energía renovable, como ahorrar electricidad en casa y en el trabajo, y formas de reducir la cantidad de basura. También hablarán sobre compostaje, descuentos y recursos educativos.

Uso de tierras y manejo de desechos

LW.1) Ampliación de zonas agrícolas	**Establecer cambios en los códigos que permitan la agricultura residencial, y desarrollar programas en los que el público siembre y venda sus propias cosechas para el 2023.** Establecer una cultura de producción de cosechas caseras. Hay que cambiar las leyes de zonificación para que se permita sembrar verduras en casa y venderlas en los mercados. Asociarse con el distrito escolar SVVSD para que los estudiantes de secundaria y preparatoria participen en programas de jardinería y producción de alimentos. Establecer cooperativas que vendan verduras sembradas en casa. Cuando las tierras inactivas se usan para la producción de alimentos, la economía se beneficiaría con estos ingresos, aumentaría la resiliencia de la comunidad al crear fuentes alternativas de alimentos. Se reduciría el consumo de combustibles fósiles al no transportar alimentos por largas distancias, disminuiría el uso de agua para el césped, y aumentaría el hábitat para los polinizadores.
LW.2) Compostaje comercial y residencial	**Incrementar la participacion en el compostaje comercial y residencial en un 75% de todos los hogares y empresas para el 2025.** Improve the ease and effectiveness of the City's existing composting program through right-sizing composting and yard waste bins, establishing curbside composting as an opt out instead of an opt in service, increase education programs and require certain high-organic waste businesses to participate in composting. Within the next year, establish a system to count participating households and businesses so that the City can track progress toward the goal.
LW.3) Downtown Pay for Parking	**Implement pay to park requirements in Longmont's downtown by 2023 in a way that encourages alternative modes of transportation and improves the experience and enjoyment of people downtown.** Establish a pay-to-park requirement downtown that disincentives car travel in the city center. The program would ultimately target a reduction in the land area needed for car parking and vehicle miles traveled to downtown, while creating select car-free streets and opening up areas currently dedicated to parking for higher use. The program would reduce paved and impervious surfaces, encourage alternative modes, and ultimately reduce greenhouse gas production. A portion of the money generated from the pay-to-park parking spaces to fund

	repaving initiatives that focus on permeable surfaces. The lack of parking can be offset by a more efficient public transportation system.

Energía renovable

RE.1) Medidores inteligentes	**Instalar medidores inteligentes que permitan una comunicación mutua entre el proveedor y el cliente en todos los hogares de Longmont para el final del 2022.** Un sistema de medición avanzada o medidores inteligentes (AMI por sus siglas en inglés), recolectaran información detallada (en intérvalos de 15 minutos) sobre el consumo de electricidad en toda la ciudad. Al brindar información en tiempo real, los medidores inteligentes ayudaran a que la ciudad nivele la oferta y la demanda de la electricidad. Podemos diseñar precios que beneficien a los consumidores, mantener las cuentas bajas y reducir las emisiones de carbono de Longmont. AMI es el primer paso para llegar a ser una ciudad que ahorre energía, siguiendo la meta de la energía renovable al 100% para el 2030, manteniendo una fuente de energía confiable, durante la transición de una economía que funciona con combustibles fósiles, a una sin carbono.
RE.2) Sistemas de manejo de energía residencial	**Empezar a educar, analizar la viabilidad del proyecto, y monitorear los Sistemas de Manejo de Energía Residencial en el 2021, con un límite de 5 años para completar el piloto en el 2026, y tener más de un 75% de clientes que usen estos sistemas para el 2030.** El sistema de manejo de energía (EMS por sus siglas en inglés) es una plataforma tecnológica formada por máquinas y programas, que permite que una compañía monitoree el uso y producción de energía, y que controle y/o automatice su uso en una casa. Se comunica con sistema de manejo de energía residencial (HEMS por sus siglas en inglés) para optimizar el manejo de energía en un área piloto o en toda una ciudad. Un análisis de viabilidad incluiría la comparación de tecnologías existentes, precios y un estudio de la cantidad de demanda que se lograría por este medio.
RE.3) Programa de ahorro de energía	**Para el 2023, PRPA y/o LPC brindarán opciones e incentivos para que sus clientes se inscriban en un programa que balancea la demanda de electricidad en el hogar, y así reducir el consumo en horas punta, cambiar la parte más alta de la demanda, o absorber el exceso de producción.** En los programas de demanda de energía, se les devuelve dinero a los usuarios si reducen su consumo de energía durante las horas de mayor y menor demanda, a pedido del proveedor. El programa no solo hace que los clientes ahorren dinero, sino que también disminuye la contaminación causada por la producción de electricidad.

RE.4) Información sobre la intensidad de las emisiones de carbono	**Para el 2025, Longmont y PRPA informarán a sus clientes, en tiempo real, sobre la intensidad de sus emisiones de carbono relacionadas con el uso de electricidad. Así habrá un equilibrio entre la demanda y la cantidad de energía renovable disponible en las redes.** Cuando los consumidores conocen la intensidad de sus emisiones de carbono, pueden optar por reducirlas e incrementar su demanda de energía renovable. El conocimiento público y el desarrollo de recursos dependen de la información que el proveedor entregue en cuanto a la composición de su energía renovable.
RE.5) Distribución de Recursos Energéticos (almacenamiento y producción de energía renovable a pequeña escala)	**Para el 2021, se creará un programa piloto de 5 años y un plan de desarrollo de 10 años para elaborar un inventario de Distribución de Recursos Energéticos que reduzcan la demanda de electricidad en horas punta y que absorban la producción adicional de energía.** El plan de Distribución de Recursos Energéticos (DERs por sus siglas en inglés) incluirá energía solar comunitaria, paneles en techos, descuentos en la compra de coches eléctricos, estaciones de recarga, y beneficiosos programas de electrificación. DERs mitigará el riesgo de producir poca energía renovable en algunas zonas, ya que habrá diferentes estaciones de electricidad. El programa aumentaría o disminuiría la demanda de electricidad de Longmont dependiendo de la hora del día. De esta forma, los pagos que Longmont hace a PRPA bajarían y se pasarían a los usuarios. Al final de la fase piloto, los programas DERs demostrarían su capacidad para reducir o aumentar la oferta y la demanda. El resultado de los pilotos puede usarse para definir obejtivos para el 2030, que serian incluidos en un Plan de Recursos Integrado que cumpla con la meta de usar energia renovable al 100% para el 2030.
Transporte	
T.1) Aumentar la eficacia del transporte público: puntos de control/servicios de bus flexibles	**Aumentar la cobertura y disponibilidad del transporte público al implementar estaciones de transferencia de buses con precios más baratos que los de FlexRide para el 2025.** Este servicio es una combinación de las rutas fijas (serie 300 de las rutas locales de RTD) y de los servicios con inscripción o llamada (por ejemplo, Via o FlexRide de RTD). La eficacia del programa depende de la coordinación con las agencias de transporte. El éxito del programa se reflejaría en el aumento del uso por parte de los adultos mayores de Longmont y una transición a flotas de vehículos eléctricos.
T.2) Infraestructura de las	**Instalar de 20 estaciones de recarga Nivel 2 para vehículos eléctricos en los principales estacionamientos del centro de Longmont en los próximos 10 años.**

estaciones de recarga de vehículos eléctricos	Incorporar más espacios de recarga en los estacionamientos públicos de alta densidad, como el centro de Longmont. Ubicar estacionamientos cercanos al centro de Longmont para que los visitantes puedan recargar sus vehículos eléctricos mientras dura la visita. Las estaciones más visibles, crean conciencia en las personas que usan vehículos impulsados por energía alternativa y las anima a usarlas. Igual se tendría que respetar el límite de tiempo del estacionamiento, por eso, se recomienda instalar estaciones Nivel 2 en lugares que permitan una recarga en dos horas.
T.3) Ciclovías interconectadas	**Crear ciclovías seguras y completas, en 20 años, que se conecten con las principales intersecciones, vecindarios y centros comunitarios sin necesidad de cruzar las avenidas principales o carreteras. Gran parte del sistema debe estar listo dentro de 10 años.** Las ciclovías que están debidamente interconectadas, completas, seguras, iluminadas, sobre el nivel del suelo y con un tráfico limitado, motivan a usar las bicicletas como medios de transporte, contribuyendo así, con la salud pública y la disminución de emisiones. Las intersecciones incluyen estaciones de bus, supermercados, servicios comunitarios y parques. El trazado de las ciclovías debe ir a la par con el planeamiento de uso de los suelos.
T.4) Horarios de trabajo alternativos	**Realizar una campaña educativa hacia el 2022 para empleadores y empleados sobre cómo reducir la congestión del tráfico en un 20% en horas punta en los próximos 10 años.** Las estrategias incluirían semanas o días laborales comprimidos, trabajo a distancia, reuniones virtuales, trabajo desde casa, estar presentes en horarios comunes de reunión, o políticas autocreadas de vacaciones pagadas. Se usarán encuestas para calcular los gastos de viaje de los empleados. Cuando la congestión del tráfico disminuye, también se reduce el estrés, la cantidad de gases de efecto invernadero y la contaminación del aire.

Recomendaciones del Equidad Comité JTP

Las siguientes recomendaciones sobre equidad se dividen en:

a) Recomendaciones para la evaluación de equidad
b) Recomendaciones generales sobre acción climática equitativa

Evaluación de la equidad

EA.1) Desarrollo de conocimientos	**Brindar información básica sobre la equidad y la acción climática.** Antes de aplicar e interpretar la "evaluación de equidad", se tiene que explicar a todos los involucrados en el proceso, lo que significa la acción climática, equidad y acción climática equitativa, ya sean políticos, empleados de la Municipalidad, socios, miembros de la comunidad, etc. El objetivo es brindar información consistente sobre estos temas.
EA.2) Perspectiva de equidad	**Usar una perspectiva de equidad en las propuestas de acción climática.** Para poder analizar las diferentes dimensiones de la acción climática, se tiene que hacer desde una perspectiva de equidad. Esto permite entender sus impactos beneficiosos y perjudiciales en diversos grupos humanos, y así poder mejorar las acciones, identificar la información sobre equidad, y crear estrategias de comunicación y sustentabilidad financiera.
EA. 3) Comunidades perjudicadas	**Centrarse en las comunidades más perjudicadas por el cambio climático.** Estas son las comunidades más afectadas por las crisis ecológicas, económicas y democráticas. Son grupos humanos que han recibido poquísimos beneficios en el transcurso de la historia. Estas son personas de bajos o medianos ingresos, personas de color, personas que hablan un idioma que no es inglés, personas con discapacidades, ancianos, niños, personas con antecedentes penales, LGBTQ+ (lesbianas, gays, bisexuales, transformistas, queers y otros), refugiados e inmigrantes. Es importante enfocarse en las comunidades más perjudicadas cuando se trabaje en la acción climática y el desarrollo de programas, para poder asegurarse que las propuestas sean equitativas e inclusivas.

Recomendaciones generales sobre acción climática equitativa

Comentario sobre la crisis del coronavirus: Las siguientes recomendaciones se elaboraron antes de que se dictara la orden de Quedarse en Casa. A causa de la pandemia, el Comité JTP quisiera hacer las siguientes aclaraciones:

- Las prioridades de la comunidad pueden haber cambiado debido a la crisis.
- La población de bajos ingresos se verá más afectada por el coronavirus y las inequidades podrían aumentar después de la crisis. Al crear programas de acción climática, es muy importante considerar los impactos económicos, mentales y de salud que provocará esta crisis.
- Las estrategias de mitigación del virus, como la de evitar el contacto social, pueden dificultar la participación y divulgación de los programas a las comunidades perjudicadas. Para elaborar estrategias de comunicación efectivas, se debe consultar con los gestores culturales y las promotoras quienes ya conocen el proceso de involucrarse en la comunidad durante una crisis.

Estas sugerencias no solo son útiles para la crisis del coronavirus, sino también para otros desastres que ocurran en nuestra comunidad.

ECA.1) Publicidad y difusión	**Involucrar a gestores culturales y promotoras** Es importante establecer un sistema de gestores culturales y promotoras que ayuden a sus comunidades a entender sistemas y programas nuevos. Estas personas ya existen en la comunidad y ya están distribuyendo recursos e información (por ejemplo, Suma Latina). Consideraciones: • Los embajadores y asesores culturales deben ser parte de la comunidad. • Ofrecerles algún tipo de pago, como tarjetas de regalo, descuentos, etc.
	Asociarse con empresas y con organizaciones sin fines de lucro Identificar empresas, instalaciones, organizaciones sin fines de lucro, escuelas (medias y la Universidad Comunitaria Front Range) y centros de alabanza (por ejemplo, iglesias) que estén dispuestos a divulgar información. Asistir a reuniones, publicar volantes, y crear centros donde se distribuya información y recursos.

Crear mensajes apropiados desde un punto de vista cultural

Los mensajes de las campañas deben ser fáciles de entender desde una perspectiva cultural:

- ¿Qué mensajes inspiran al grupo? Usar mensajes positivos y resaltar que las acciones no crean un peso más.
- Evitar traducciones literales y poner más énfasis en adaptar las traducciones según la cultura.
- Abordar el estigma asociado con las acciones.

Crear una difusión objetiva

Empezar a difundir información en las comunidades más necesitadas (jóvenes y ancianos, vecindarios de casas móviles, personas con discapacidades, inmigrantes, familias con niños pequeños, personas sin techo) y en comunidades de bajos y medianos ingresos.

Algunas estrategias de divulgación son (teniendo en cuenta el tipo de público):

- Mensajes específicos en redes sociales (según la demografía o geografía).
- Anuncios de radio y televisión (alcanza a más personas, especialmente a los ancianos).
- Anuncios de la Municipalidad (a través de facturas de servicios, boletines informativos).
- Informar de puerta en puerta y organizar eventos en vecindarios entregando pequeños premios (algunos vecindarios prefieren preparar un evento en vez de que toquen sus puertas, y viceversa).
- Diseñar estrategias de difusión para públicos específicos (por ejemplo, mensajes especiales para los jóvenes y sus familias, en vez de tener un solo mensajes para todos los sectores).
- Incentivos para usuarios frecuentes.
- El personal de la Municipalidad debería participar y promover las iniciativas de acción climática.

ECA.2) Datos e investigación	**Usar datos e investigación para entender aún más a las comunidades perjudicadas.** Antes de desarrollar una acción climática, primero se debe entender a la comunidad: sus actitudes, intereses, motivaciones, nivel de acceso a los recursos y cómo se relaciona con la acción climática. Para lograrlo, se deben identificar datos existentes e invertir en datos nuevos, e involucrar a las comunidades perjudicadas para identificar los impactos, necesidades, brechas e inequidades de las actuales y futuras acciones climáticas.
ECA.3) Acceso a programas	**Identificar obstáculos y aumentar el acceso** Cuando se evalúe un programa de acción climática, hay que involucrar a las comunidades perjudicadas e imaginar diferentes situaciones de los usuarios para identificar las barreras en el acceso. Algunos impedimentos son: • Acceso al internet, teléfonos y aplicaciones (acceso desigual a la tecnología). • Estado migratorio y no tener papeles. • Barreras del idioma (idiomas distintos, vista deficiente, términos muy técnicos, etc.) • Circunstancias especiales (aparatos médicos que deben funcionar todo el día, trabajo nocturno, etc.) • Impedimentos económicos • Impedimentos geográficos (acceso y precios de las opciones de transporte). • ¿Qué otros impedimentos enfrentan las comunidades perjudicadas? Revisar las recomendaciones en la sección de Publicidad y Difusión. El acceso a los programas puede verse afectado por circunstancias especiales como: • ¿Cuáles son los diferentes escenarios en los que alguien usaría el programa? Por ejemplo, si alguien tiene que tomar el bus para acceder al programa, ¿qué más necesitaría? • ¿Y si ocurre una emergencia? Considerar que los horarios de atención no serán los normales. Por último, hay que considerar la motivación de los participantes y cómo esto afecta el acceso a los programas: • ¿Cuáles serían los motivos para participar en el programa (preocupación por el cambio climático, ahorrar dinero, etc.) • ¿Cómo se podría adaptar la acción climática para satisfacer las motivaciones de la población y los negocios?

	• ¿Hay otras prioridades en la vida de los personas que están por encima de la acción climática? (por ejemplo, conseguir una vivienda barata). • ¿Es posible que la acción climática beneficie esa prioridad? (por ejemplo, ¿esa acción climática podría conectarse con algún tipo de asistencia para familias sin hogar?)
ECA.4) Acceso equitativo al empleo	**Crear una transición justa para trabajadores afectados** Habrá trabajadores e industrias que se verán afectados negativamente por las acciones climáticas. Cuando se evalúe una acción climática, hay que identificar a los trabajadores perjudicados (sector petrolero y de gas natural, concesionarios de autos, etc.) y las posibles oportunidades de trabajo y entrenamiento.
	Programas de entrenamiento y desarrollo de la fuerza laboral Pasantías, certificados y otras herramientas de desarrollo de la fuerza laboral deben estar al alcance de todos. Considerar las siguientes: • Asociarse con organizaciones locales (por ejemplo, la oficina de la Fuerza Laboral del condado de Boulder) como escuelas y programas vocacionales. • Involucrar a las comunidades perjudicadas y trabajadores afectados. • Formas de desarrollo profesional a largo plazo que promuevan el crecimiento y aprendizaje de destrezas. • Identificar qué impide que no se complete o participe en los programas de certificación (salud, guardería, estado migratorio, discapacidades, etc.) • Crear solicitudes fáciles de llenar que sean entendibles para cualquier nivel de educación.
ECA.5) Salubridad y seguridad	**Entender y mejorar la seguridad** La sensación de salubridad y seguridad es un punto importante de toda acción climática. Si una ruta de transporte, una casa o un negocio no inspiran esta sensación, entonces la gente no va a querer usarlas. La capacidad de mejorar estos aspectos, también es importante. Muchos inquilinos no tienen el poder de mejorar la salubridad y seguridad de sus casas. Una forma de identificar los problemas de salubridad y seguridad es hablando con los participantes e investigando datos (estadísticas de delincuencia, hospitalizaciones respiratorias).

ECA.6) Evaluar las cargas económicas	**Entender las cargas financieras de los hogares de bajos ingresos.** Hay que trabajar con las comunidades perjudicadas y con los hogares de bajos ingresos para comprender si tienen que hacer pagos caros por adelantado, o si tienen facturas caras u otros gastos importantes que les impidan participar en las acciones climáticas. Considere lo siguiente: • ¿Hay programas de ayuda financiera que puedan acoplarse a esta acción climática? • ¿Deberían implementarse programas nuevos que reduzcan la carga económica (por ejemplo, programas que se centren en el de ahorro de energía antes que la electrificación)? • ¿Cómo pasarán estos gastos del propietario al inquilino? • ¿El costo del programa es un impedimento?
ECA.7) Programas comunitarios	**Promover la autosuficiencia y el acceso a recursos dentro de las comunidades y vecindarios** Los programas locales, estatales y federales pueden tener limitaciones con el financiamiento. Por eso, para aumentar la equidad en el acceso a los recursos, como la comida, se debe crear y apoyar a los programas no gubernamentales que promuevan la autosuficiencia a nivel familiar o vecinal. Por ejemplo, los huertos comunitarios brindan un acceso equitativo a las verduras.
ECA.8) Mecanismos de financiamiento	**Identificar alternativas de financiamiento** A continuación, hay una lista de alternativas de financiamiento cuando los fondos sen escasos: • Primero, atender a los que más lo necesitan. • Solicite subvenciones y trabaje con empresas y fundaciones locales. • Crear un programa donde la población y empresas donen productos o dinero y se ayuden entre ellas mismas. • Crear programas de “pague lo que pueda” o “adopte un/una…” • Pago opcional para programas en las facturas de servicios.

Gestión

El Grupo de Trabajo discutió varias opciones para gestionar, de manera adecuada, la implementación de las recomendaciones contenidas en este informe. La estructura de la gestión se basó en tres elementos principales:

1) Integrar el tema de la supervisión de las recomendaciones de acción climática en la Mesa Directiva de Sustentabilidad;
2) Formar comités técnicos ad-hoc, si fuera necesario, para que apoyen la implementación de ciertas recomendaciones;
3) Incorporar recomendaciones de acción climática dentro de los planes ya existentes del Plan de Trabajo del Concejo.

El Grupo de Trabajo recomienda que la Mesa Directiva de Sustentabilidad pida informes trimestrales que documenten el proceso de implementación de las recomendaciones; y que escoja voluntarios para seguir el proceso de recomendaciones específicas. Se sugiere que los miembros del Grupo de Trabajo asistan a reuniones de la Mesa Directiva de Sustentabilidad, como miembros del público.

Además de la labor de la Mesa Directiva de Sustentabilidad, el Grupo de Trabajo recomienda que los comités técnicos ad-hoc se formen al inicio de la fase de implementación. Esto permitirá que el personal de la Municipalidad se desempeñe mejor en todas las fases de la implementación, incluyendo el planeamiento, monitoreo y evaluación.

Participación y comentarios de la comunidad

El personal de la Municipalidad y del Instituto del Ambiente Físico (IBE por sus siglas en inglés) crearon un plan para que la comunidad conozca sobre la Resolución de la Emergencia Climática, y para que el Grupo de Trabajo sepa más sobre las prioridades de la comunidad, posibles impactos negativos de las acciones climáticas, y oportunidades para fortalecer las recomendaciones. El plan consistía en usar un cuestionario residencial y comercial, organizar mesas informativas y grupos de enfoque durante el mes de marzo.

La pandemia del COVID-19 interrumpió significativamente estos esfuerzos. Antes de que se suspendieran todo tipo de eventos, se llegaron a realizar tres mesas informativas y tres presentaciones a varios sectores involucrados, como la Junta Asesora de Adultos Mayores, el Comité Multicultural y la Alianza de Arrendatarios de Longmont. Además, se repartió una encuesta residencial y comercial en inglés y español. Pero, varias de estas actividades de participación comunitaria no llegaron a realizarse, como más mesas informativas y presentaciones, un almuerzo con los constructores, y conversaciones con otros socios comunitarios y sectores involucrados. Los hallazgos de este plan se divulgaron con el Grupo de Trabajo para que perfeccionen el esbozo de las recomendaciones. Podrá encontrarlos en el Anexo D: Informes de participación comunitaria.

Principales hallazgos

Se realizaron tres mesas informativas y tres presentaciones, ambas en persona. Se les pidió a los participantes, que llenaran una encuesta y, también se anotaron sus comentarios. Debido a la falta de tiempo y de recursos, no se incluyeron estos comentarios en el informe del cuestionario, y solo se integraron en el informe de actividades participativas. El personal de la Municipalidad recibió correos electrónicos de vecinos y negocios expresando su preocupación sobre el proceso de participación y los posibles impactos negativos de las acciones climáticas. En el Anexo D (Informes de participación comunitaria), se encuentra el informe final del cuestionario, el informe de las actividades participativas, y los comentarios recibidos vía correo electrónico.

Encuesta sobre la Acción Climática

La encuesta se repartió en eventos, en afiches, pantallas en el Centro Cívico, en la biblioteca, en el centro St. Vrain Memorial Building y a través de listas de distribución por correo electronico. La encuesta residencial tuvo 352 respuestas (347 en inglés, 5 en español) y la comercial 20 (19 en inglés, 1 en español).

Las respuestas de apoyo hacia las acciones climáticas, fueron mayores que las respuestas de rechazo; a pesar que hubo respuestas con una fuerte oposición. El informe mostró 3 ideologías:

- Personas que apoyaban los cambios, incentivos y acciones climáticas.

- Personas que expresaron preocupación, porque el gobierno no debería subir los impuestos o subsidiar la acción climática, y preferían soluciones basadas en el mercado.
- Personas a las que les interesaba dar más servicios y beneficios a las comunidades de bajos ingresos, minimizando los impactos negativos (e.g., que no sean asequibles).

Limitaciones

Este no fue un cuestionario estadístico y no fue diseñado ni analizado para esa finalidad. Cabe mencionar que, el cuestionario ofrecía opciones forzadas, donde los participantes no podían escoger si no les gustaban las acciones climáticas propuestas. Esto hubiera afectado la cantidad de respuestas positivas y negativas. Por esto, los resultados sirven como guía para futuras acciones climáticas, y solo deben considerarse como un punto de partida para comprender el sentir de la comunidad en cuanto a las acciones climáticas.

En los resultados de la encuesta puede estar faltando la opinión de algunos sectores de Longmont, ya que los siguientes grupos tuvieron poca participación:

1. Jóvenes (menores de 25 años de edad)
2. Hogares de bajos ingresos (menos de $50,000 al año)
3. Hispanos/Latinos

Es importante resaltar la falta de representación de estos sectores en los Estados Unidos, pues ellos son los que más sufren los impactos negativos del cambio climático[3]; y el incluir sus voces, especialmente las de las comunidades más afectadas, es la clave para crear acciones climáticas efectivas. Talvez estos grupos no pudieron participar porque se cancelaron las siguientes actividades:

1. Mesa informativa en Front Range Community College
2. Mesas informativas en el OUR Center (solo se realizó 1 de 3)
3. Presentación en la Asociación de Vecinos Líderes
4. Presentación en la reunión mensual de la Coalición Latina

En las respuestas de la encuesta empresarial, no se consideró la demografía. Hubo un bajo índice de respuestas y por eso no se anotaron las tasas de representación.

[3] Oficina de protección del medioambiente de los Estados Unidos (2016). Impactos del clima en la sociedad

Bibliografía

El Grupo de Trabajo utilizó la siguiente información bibliográfica para desarrollar sus recomendaciones. Están listadas por tema.

Para todos los subgrupos

- Modelo por tema, Anexo A: Documentos guía
- Modelo de metas inteligentes (SMART), Anexo A: Documentos guía
- Perfil de la comunidad de Longmont 2019
- Envision Longmont
- Plan de Sustentabilidad de Longmont e Indicadores de Longmont – Métricas del plan de Sustentabilidad
- Resumen de la encuesta y conversaciones comunitarias del JTP
- Informe del inventario de gases de efecto invernadero
- Actualizaciones del progreso del plan integrado de Platte River
- Guía ejecutiva del planeamiento inclusivo C40 e Informe C40
- Proyecto Drawdown 10 ideas principales

Adaptación y Resiliencia

- Sinopsis de temas Adaptación y Resiliencia
- Estudio de los impactos del clima del condado de Boulder y Resumen de una página
- Plan de mitigación de desechos tóxicos del condado de Boulder y Plan 2016-2021
- Estudio de vulnerabilidad del cambio climático de Colorado
- Mesa informativa sobre el actual plan de inundaciones
- Desarrollando un programa de información pública para crédito según el sistema comunitario de clasificación del Programa Nacional de Seguros contra inundaciones
- Informe del calor asesino
- Oficina del manejo de emergencias y Prepárate Longmont
- Plan maestro de aguas con impurezas
- Plan de St. Vrain resiliente
- Resiliencia para todos
- Plan maestro de ahorro de agua: actuales descuentos y programas de Resource Central

Uso de energía en edificaciones

- Sinopsis de temas de uso de energía en edificaciones
- Concejo estadounidense para una economía que ahorre energía (ACEEE): informe 2019 sobre ahorro de energía, edificios con cero energía, etc.
- Arquitectura 2030
- Trabajos ecológicos Colorado
- Informe de electrificación equitativa de edificaciones
- Instituto de investigación e iniciativas de las Montañas Rocosas

Educación y difusión

- Sinopsis de temas de educación y difusión
- Documento interno de la municipalidad sobre la campaña Conservación y su bolsillo 2020
- Documento interno de la municipalidad sobre el plan de comunicaciones acerca de la sustentabilidad
- 50 formas de transmitir su mensaje
- Documento interno de la municipalidad con los resultados detallados de la encuesta y conversaciones comunitarias JTP
- Documento interno de la municipalidad sobre la estrategia de publicidad para el programa de negocios sustentables
- El camino a las comunidades positivas – Mensaje climático
- Un diseño de políticas municipales para un camino más inclusivo hacia la prosperidad
- Documento interno de la municipalidad sobre cómo la energía renovable hará que Longmont sea más resiliente y con seguridad económica
- Informe de trabajos ecológicos Colorado
- Definiendo la economía ecológica: un ejemplo de desarrollo de la economía ecológica
- Hacer que la ecología funcione
- Informe inclusivo y ecológico del grupo de CU Boulder "Just Transition Collaborative"
- Centro de desarrollo de pequeñas empresas
- Web estatal del comité asesor de transiciones justas
- Fuerza laboral de Boulder

Uso de suelos y manejo de desechos

- Sinopsis de los temas de uso de suelos y manejo de desechos
- Estudio piloto de viabilidad de la retención del carbono

Energía renovable

- Sinopsis de los temas de energía renovable
- Trabajos ecológicos Colorado

Transporte

- Sinopsis de los temas de transporte
- Concejo estadounidense para una economía que ahorre energía (ACEEE)
- Sistema de transporte que ahorre energía
- Encuesta del 2019 aplicada al personal de la municipalidad que se desplaza para trabajar
- Estaciones para recargar vehículos eléctricos – Mapa de Google
- Mapa de banquetas incompletas de Longmont

Glosario

Clima: temperatura promedio registrada en un lugar durante una gran cantidad de tiempo (varias décadas). Los estudios científicos indican que los impactos del clima siguen aumentando, como las temperaturas extremas, sequias e incendios forestales.

Cambio climático: es un cambio a largo plazo que ocurre en las características del clima promedio, a nivel local, regional o mundial. El cambio del clima en el siglo XX y XXI, ha sido causado por la actividad humana, sobre todo por el aumento de los gases de efecto invernadero provenientes de los combustibles fósiles. Las fuerzas de la naturaleza también contribuyen con el cambio climático[1], como el flujo cíclico de los océanos y la actividad volcánica.[4]

Resolución de emergencia climática: el 8 de octubre de 2019, el Concejo Municipal de Longmont aprobó una resolución que declara una emergencia climática y, la intención de la Municipalidad por tomar acciones inmediatas para enfrentar la crisis climática.

Grupo de trabajo de acción climática: grupo formado el 18 de diciembre de 2019, compuesto por habitantes de Longmont, que representan a los sectores más afectados por el cambio climático; otros expertos en el tema, socios comunitarios y personal de la Municipalidad. Ellos están a cargo de discutir los pasos que la Municipalidad debe tomar para convertirse en una ciudad sustentable y sin emisiones de carbono; y de crear un informe que describa esos pasos dentro de los 120 días de aprobada la resolución.

Adaptación climática: adaptación significa hacer arreglos que limiten los efectos negativos del cambio climático, y al mismo tiempo, crear ciudades resilientes y más fuertes.[5] Las medidas de adaptación se encuentran en las recomendaciones del Grupo de Trabajo para la Acción Climática.

Mitigación climática: mitigación significa prevenir la emisión de gases de efecto invernadero o tomar acciones que reduzcan el avance del cambio climático.[6] Se espera que los esfuerzos de mitigación sean una prioridad en las recomendaciones del Grupo de trabajo para la acción climática.

Ahorro de energía: Es realizar las mismas tareas usando menos electricidad, como, por ejemplo, hacer cambios que ahorren energía en el hogar o en los negocios, o remplazar artefactos eléctricos.

Equidad: "[l]a ausencia de diferencias remediables entre grupos de personas. Los grupos pueden estar definidos por características sociales, económicas, demográficas o geográficas."[7]

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[4] NASA. (Mayo 2020). Generalidades: clima, calentamiento global y cambio climático.

[5] Universidad de California, Davis, Definiciones sobre la ciencia y clima, visitado en junio, 2019.

[6] IPCC. Grupo de trabajo II: mitigación del cambio climático.

[7] C40, 2019.

Acción climática equitativa: Plan, programa local y cambio de hábitos que reducen la contaminación relacionada con el clima y refuerza la capacidad de adaptación en la comunidad, sin producir daño y apoyando a todas las comunidades en base a sus necesidades.[8]

Comunidades perjudicadas: Estas son las comunidades más afectadas por las crisis ecológicas, económicas y democráticas. Son grupos humanos que han recibido poquísimos beneficios en el transcurso de la historia. Estas son personas de bajos o medianos ingresos, personas de color, personas que hablan un idioma que no es inglés, personas con discapacidades, ancianos, niños, personas con antecedentes penales, LGBTQ+ (lesbianas, gays, bisexuales, transformistas, queers y otros), refugiados e inmigrantes. Es importante enfocarse en las comunidades más perjudicadas cuando se trabaje en la acción climática y el desarrollo de programas, para poder asegurarse que las propuestas sean equitativas e inclusivas.

Gases de efecto invernadero: gases que calientan la atmósfera al absorber y atrapar la luz infrarroja (onda larga) en la atmósfera baja. Estos gases permiten que la luz del sol directa (onda corta visible, como los rayos ultravioletas) alcance la superficie de nuestro planeta sin problemas, porque esos gases son transparentes para la luz de onda corta. Una vez que la luz de onda corta llega a la superficie de la Tierra, esta vuelve a ser irradiada en la atmósfera como luz de onda larga (infrarroja). Los gases de efecto invernadero absorben esta energía y calientan la atmósfera baja. Es cierto que los gases como el dióxido de carbono se producen naturalmente en la atmósfera, pero, la actividad humana ha incrementado estas concentraciones en la atmósfera.[9]

Comité del Plan de Transición Energética Justa (JTPC por sus siglas en inglés): el JTPC incluye las perspectivas de las comunidades más afectadas, dentro de las conversaciones de acción climática. Este Comité complementa los esfuerzos del Grupo de Trabajo de Acción Climática.

Electricidad renovable: Electricidad creada por fuentes de energía renovable (Vea el significado de energía renovable).

Resiliencia: para Longmont y sus socios significa, aumentar la capacidad de anticipar los riesgos, limitar sus impactos, recuperarse rápidamente usando la adaptación y el aprendizaje frente a cambios bruscos y las crisis.[10]

Metas inteligentes (SMART por sus siglas en inglés): SMART son las siglas de las palabras "específico, medible, viable, realista y marco de tiempo (**S**pecific, **M**easurable, **A**chievable, **R**ealistic, y **T**imely). Una meta inteligente debe cumplir con todas estas características.[11]

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[8] Definición grupal del Comité JTP, 2020.

[9] Administración nacional oceánica y atmosférica, ¿Qué son los gases de efecto invernadero? Visitado en agosto, 2019.

[10] Envision Longmont, 2016

[11] Herramientas de la mente. Metas SMART: Cómo alcanzar sus metas.

Clima: es el estado diario de la atmósfera y sus variaciones a corto plazo, que van de minutos a semanas. Normalmente, las personas consideran que el clima es la combinación de temperatura, humedad, precipitaciones, nubosidad, visibilidad y viento.

Appendix A: Guiding Documents

Focus Area Template

Focus Area:

1) Long List Potential Policies and Solutions

Based on subject matter expertise identify policy and solutions to address climate change and place them in the boxes below. Remember to identify solutions that solve for equity and are oriented toward actions the City can take.

2) Sort for Equity – New Ideas allowed!

Place identified solutions from the long list into the four boxes below. Equity concerns for Longmont include: cost of living, rent, utilities, food; Job opportunities & workforce development / training; Ease, accessibility, and safety of transportation (esp. bike, bus, & pedestrian); Housing security, especially mobile home parks; Child care and youth activities; Health, access to health care; keeping families together.

High climate impact, negative or neutral impact for equity (how might we make these solutions more equitable)?	**High climate impact, High positive equity impact** (great solutions)
Low climate impact, negative or neutral equity impact (poor solutions)	**Low climate impact, high positive equity impact** (how might we increase beneficial climate impact from these solutions)?

1) Short List of Policies and Solutions **Identify 5-10 policy and solution recommendations.**		2) What is the City already doing	3) What are the gaps
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
?			

Notes:

4) Indicators

1) Identify indicators of progress in your topic area	2) Prioritize a short list of Indicators for your focus area	3) What monitoring or tracking system is needed to evaluate and report progress over time?

5) Investment Opportunities, Needs & Considerations

Policy or Solution	Level of funding needed to implement proposed policies and solutions	Potential revenue sources to fill funding gaps

6) Policy / Solution Matrix

Strategy (Policy or Solution informed by science and equity)	Objective (big picture description of desired outcomes)	Timeframe (short, medium, long)	Target (SMART) – specific, measureable, achievable, relevant, time bound	Potential Impacts – who might be impacted and how (benefits, barriers, negative outcomes)	Financial Summary (from step 7)	Marketing, training, and incentives needed to enable passage of equitable policies and solutions

SMART Goals Policy Template

[Subgroup Area]

[Recommendation Title]

Goal/Objective
In one sentence, describe the overall goal (desired outcome) of the recommendation.

Recommendation Summary (Specific)
Describe policy or solution recommendation informed by science and equity. Three to five sentences, no more than two-three paragraphs.

Specific: What will be accomplished? What actions will you take? Who is involved, what are you trying to accomplish (more detail offered in relevance), general timeframe (more detail offered in the Time-Bound section), where does the action take place.

Measurement
Describe how we will measure progress for this specific goal/recommendation? What metrics are we going to use to if/how well we are meeting the goal? What is the source of the metrics?

Achievability
Under what conditions is achieving the goal realistic? What are the necessary skills and resources?

> *Financial Summary: Informed from step 7 from template – what are the funding needs and possible sources of funds?*
>
> *Marketing, Training and Incentives – List actions needed to enable passage and/or successful implementation of the policy/solution.*

Relevance
How does the goal align with mitigating and adapting to climate change? Why is the result important? Consider both hard and soft benefits (e.g. expected to address 5% of total GHG reduction goals over five years, reduces utility burden on low-income households, improves public health, etc.).

Time-Bound
What is the time frame to accomplish the goal? What are the key milestones?

Social and Economic Impacts
Describe who might be impacted and how (benefits, barriers, negative outcomes). Include suggestions for how to mitigate any potential negative outcomes.

Appendix B: Climate Action Task Force Full Recommendations

Adaptation and Resilience

AR.1) Public Health in a Warming Climate

Goal/Objective
Longmont will prepare for the threats to public health from a warmer, changed climate.

Recommendation Summary
Longmont should develop strong collaborative efforts with Boulder County Health and Colorado Department of Public Health & Environment (CDPHE) to formulate a set of issues and solutions for a warming climate. This needs to include the needs of low-income residents and residents who are experiencing homelessness who have not only less access to health care, but also to an environment that is protective during periods of extreme heat and/or poor air quality. In addition, the plan should include methods to meet the mental health requirements of people. Another facet of the plan will be assisting residents with mitigation of air pollution from smoke and other pollutants. The plan must also be ready to implement methods of detection, surveillance and treatment of diseases that may flourish in warmer Longmont. Workers who labor in an outdoor setting also need training and protection from heat. Meetings with Boulder County and CDPHE could occur this summer. ***The group should have a plan outlined within 1 and a half years (by January 2022) or sooner based on the timeline of the COVID-19 pandemic.***

Target

Specific:
The City of Longmont, Boulder County Health and CDPHE should develop a plan to address public health from a warmer, changed climate by January 2022 at the latest.

Measurable:
The plan should be carefully developed and ready for implementation. The plan should include indicators and metrics to measure progress. Potential Plan examples are:

- Provide shelter for people experiencing homelessness any time daytime temperatures are over 100° F and nighttime temperatures are over 80° F.
- Air conditioners made available to lower-income residents.
- Cooling centers and water play areas.
- Alerts with expected actions for days with high pollution.

- Plan for health emergencies for novel diseases.

Achievable:
Funding for implementation will need to be part of the planning process and become available for implementation.

Once the plan is developed, residents need to be aware of resources such as wading pools and access to creek wading areas to cool off on high heat days. Health care providers will need to be aware of the plan and how/when to access that plan if they see a new public health threat not previously seen in the community.

Relevant:
The goal is to mitigate effects on public health by carefully planning and being ready to implement solutions.

Time-bound:
Meetings with Boulder County and CDPHE could start this summer or fall of 2020. The group should have a plan outlined within one and a half years (by January 2022) or sooner, depending on the timeline of the COVID-19 pandemic.

Social and Economic Impacts
Failing to implement could have impacts on community health. Those without adequate cooling and/or shelter will be more adversely impacted as will those who have existing health conditions such as asthma, COPD, or heart ailments. The purpose of this goal is to develop a plan that looks at all those potential impacts and provide pathways to lessen those impacts.

AR.2) Water Conservation

Goal/Objective
Prepare the City of Longmont for potential sustained drought conditions from changes in temperature and precipitation.

Recommendation Summary
Water conservation measures and policies should include the promotion of xeriscaping, use of native vegetation in parks and open spaces, city programs that offer support for xeriscaping for residents and businesses (free architectural designs, free pea gravel, mulch, classes and plant giveaways). Educational awareness programs and promotional events offered by the City's Public Works and Natural Resources Department should inform residents about the benefit of carbon sequestration, forest canopies, using native plants, low water use appliances, and xeriscaping. HOA and city

ordinances will offer incentives to promote xeriscaping and low drought gardening. In addition, a plan for water rationing in the event of a prolonged drought will need to be reviewed and updated.

Target

Specific:
Significantly expand the Longmont water conservation program to reduce citywide water usage by 35 to 40% by 2025.

Measurable:
Water consumption should show a decline in use. The Water Efficiency Master Plan can be updated to adopt a measure that tracks excessive use by residences and businesses and charges higher rates for overconsumption.

Achievable:
Financial Summary: An estimation of staff time and landscape transitions need will need to be evaluated and then added to the city budget.

Marketing, Training, and Incentives: Education, training, and promotion will be key to getting resident ownership and participation in conservation efforts.

Relevant:
Water conservation efforts will assist in addressing climate change issues by conserving our water and preparing for potential droughts.

"This climatic change could have a negative effect on agriculture, wildfires, energy and water availability in the area. Additional costs that may be incurred to mitigate the effects of these droughts include increasing water supply from external sources, compensating agricultural operations for reducing water-intensive crops, incentivizing homeowners to change landscape items to be more drought resistant, and increasing fire mitigation procedures to reduce wildfire hazards. Concurrently, the impact on usage from both underground aquifers and reservoirs will need to be examined to determine if traditional usage levels can be continued, or whether usage levels may have to be monitored to ensure long-term availability of water."

Source: Resilient Analytics April 2018 Report on Boulder County Climate

Time-bound:
By 2025, total city water use should decline by 35 to 40% below the 2019 baseline.

Social and Economic Impacts

Water conservation helps to ensure adequate supply for necessary uses in a changing climate with unpredictable impacts to water availability. Golf courses and city parks may change in appearance and functionality to achieve this goal.

AR.3) Flooding Mitigation and Preparedness Education

Goal/Objective

Climate change will produce more severe flooding events in Longmont. An outreach program will help to familiarize the public on current City flood mitigation and the benefits for property owners.

Recommendation Summary

Flood mitigation is a complex process that involves State and local regulations needed to preserve property values and protect the public from damages associated with flooding events. Developers, builders and property owners are not always aware of the complex regulations when building or preserving buildings in 100-year floodplain (areas designated by FEMA prone to flooding with at least 1% chance of a 100-year size flood every year.) More work is needed to make the public aware of how flood regulations work to mitigate the damaging effects of flooding for new and existing buildings. Making the public aware of ongoing processes and changes in floodplain management will help to prepare the city by empowering communities to better understand flood management and how development regulations minimize damages and improves public safety. Public awareness can be improved by providing flood awareness events and information to educate the public on how to prepare for future flooding. Community preparedness is enhanced by understanding how flood waters affect new or existing buildings and informing property owners of construction enhancements that will help protect their buildings from flood damage.

Target

<u>Specific:</u>

Public awareness can be enhanced with outreach activities such as:

- Sending out brochures to residents in flood plains each year.
- Initiating a flood awareness week where the city may publish articles in the local newspapers and provide information at the Longmont Library and other locations or venues.
- Provide information to realtors on how to read flood maps and determine if new buildings or improvements to buildings in flood plains are allowed who in turn communicate this information to clients.

<u>Measurable:</u>

It is not the intent to educate the public on the complex engineered requirements of flood mitigation but rather to inform and educate them on how the City's Emergency Action Plan helps prepare for

flood events and how regulations can help to build or remodel responsibly in the floodplain. New projects are not allowed to be constructed in flood plans. (Flood Insurance Rate Map) show which properties located in a 100-year flood plains that are required to comply with development regulations when building new or improving existing buildings in flood plains. And the NFIP (National Flood Insurance Program) has been established to require insurance coverage to protect structures located in the flood prone areas.

Achievable

Implementation of an awareness campaign is relatively inexpensive and would include printed brochures, a booth in a busy venue, mailings to property owners, media releases during awareness week and updating information on city websites. Requests for more technical information can be provided by City's Floodplain Administrator who is also an engineer in the Public Works and Natural Resources Department will follow-up calls. Necessary skills and resources are minimal for initial contacts with more technical information provided by city staff when a project is proposed. Developing the plan is not complicated and we can model a plan based on what other cities are already providing to their communities.

Relevant

Informing the public about flood plain management will help to mitigate flooding events to best protect public health and property by implementing proven regulations for new and improved buildings.

Time-Bound

Implementation of a public awareness campaign can start now and be ready for roll-out by next year before the building season heats up.

Social and Economic Impacts

Implementing awareness for floodplain management can reassure the public that there are ways to protect buildings and public health by careful preparation. The economic impacts are beneficial to society by promoting improvements to help preserve the quality of life and protect homes and businesses from flooding dangers. All residents will be impacted in many ways as the climate warms. The purpose of this goal is to develop a plan that looks at all those potential impacts and provide pathways to lessen those impacts.

Building Energy Use

BE.1) Building Codes: Improve Building Codes to include energy conservation measures and promote renewable energy.

Recommendation Summary
The City of Longmont should adopt the 2021 International Code Council (ICC) set of codes for both commercial and residential buildings. The Climate Action Task Force also recommends the adoption of new appendices to the code that include provisions to promote renewable energy use and energy conservation:

1. Solar ready wiring for solar PV rooftop or yard installations
2. Car charging ready wiring in garages
3. Energy Star rated appliances
4. Updated codes for electric heaters and electric water heaters option

Objective
Improve building codes to include additional energy conservation measures including solar ready wiring, electric vehicle (EV) charger ready wiring, EnergyStar appliances, and electric heaters and water heaters. Adopt and implement new codes and policies by 2022.

Target
Reduce commercial building energy use, promote all-electric buildings, and encourage residential EV adoption and electrification to lower the city's energy costs and greenhouse gas emissions. Estimates for energy savings for buildings are expected to be as much as 10% for energy costs.

Timeframe
New codes are scheduled to be adopted about one year after they are published. The City has time to analyze the changes before recommending adoption by City Council. The time frame will be approximately January 2022.

Social and Economic Impacts
Homeowners and renters will benefit the most from the new energy conservation codes and standards. Contractors and builders will also benefit by offering homes that are solar ready, car charging ready, and highly efficient homes. These homes can command a higher price on the market due to the long-term savings and efficiency benefits of lower energy costs for the owner.

At the same time, we need to be concerned about the additional complexities and requirements that may make homes less affordable for first time home buyers and disadvantaged community members.

Code and beyond the code changes will need to be balanced with a need for affordable housing for our disadvantaged members of the community.

Financial Summary
The average cost to provide a solar ready and car charging ready homes is the cost of the electrical cable or conduits and the labor to install them. Longmont Power & Communications' (LPC) Energy Strategies and Solutions team can provide estimates of these costs per home to educate both existing homeowners and new home builders.

In addition, we need to bear in mind that affordable housing is a large concern for first time home buyers and disadvantaged community members

Marketing, training, and incentives
The Energy Strategies and Solutions Team at the City of Longmont can develop materials outlining the full costs and benefits of the enhanced building codes the Climate Action Task Force recommends. Public events and interactive displays can be developed to educate the public and create awareness of these measures to promote the benefits of owning a home that is efficient and contributes fewer greenhouse gas emissions.

BE.2) Electrification: Create an eight-person Electrification Feasibility Committee that prioritizes reducing carbon and greenhouse gases (GHG) while keeping housing affordable for the most vulnerable community members.

Recommendation Summary
Longmont needs to develop a workable and comprehensive electrification policy as soon as possible. City policy can leverage best practices and lessons learned through City programs and relevant municipal case studies. The policy should be both ambitious and realistic, offering a reasonable phased action plan for the next ten years. The material must be vetted, documented, and presented in non-technical ways that will allow it to earn City Council approval and broad public buy-in. A view to maintaining and improving the affordability of local housing stock needs to be incorporated.

Objective
Growing awareness of the shared global climate emergency has prompted a sharp increase in the number of American cities considering the shift towards beneficial electrification. In joining this movement, the City's options must be explored carefully, explained clearly, and implemented in phases with care and oversight. Our objective is to use careful, effective, step-by-step planning to drastically reduce Longmont's commercial and domestic consumption of fossil fuels by 2030.

Target

The Climate Action Task Force recommends that the City Council create an eight-person Electrification Feasibility Committee to oversee this research and develop a phased plan, showing advantages and constraints. The committee should consist of the Longmont Power & Communications (LPC) team that is currently addressing this issue along with Sustainability staff, and several community members. It should ensure that priority is given to maintaining affordable housing stock for our most vulnerable residents. Their report should be submitted by Nov. 1, 2021. The long-term target is to drastically reduce fossil fuel use in the City's buildings by 2030.

Timeframe

In 2019, as Longmont expanded its climate research following the 2016 Sustainability Plan, it stressed the need to develop a fair and viable "Building Electrification Strategy." As a next step, the Electrification Feasibility Committee should submit, by November 1, 2021 a full evaluation and phased plan. From Nov. 15, 2021, to Feb. 15, 2022, there should be three months of public discussions and information sessions on the plan's feasibility and social justice implications. By March of 2022, the City Council should take steps to approve and implement the phased plan. Regulations like a moratorium on gas hook-ups in all newly constructed low-rise buildings and homes should be gradual.

Before the end of 2025, the City should conduct follow-up studies to analyze any improvements or bottlenecks as a result of the new strategy. Such careful monitoring can maximize potential co-benefits and minimize undesirable trade-offs.

Social and Economic Impacts

Urban electrification yields benefits such as enhanced productivity, improvements in quality of life and public health, protection of ecosystems, and safeguarding of ecosystem services for future generations. Climate and atmospheric benefits can accrue via the general electrification of energy uses, with additional benefits for fuel costs and human health. However, these benefits are variable depending on factors such as the generation mix of the electricity grid.

Societal barriers, cultural practices, and political preferences will need to be addressed in order to make this initiative successful. For example, many chefs and home cooks prefer natural gas cook tops over induction technologies. Natural gas fireplaces are also popular among residential customers.

Economically, the costs of transition to all-electric buildings are significant: LPC estimates that expanding the capacity of existing substations and, if necessary, siting and creating an additional substation with larger capacity transformers to meet the increased load could cost several million dollars. In terms of end-use technologies, it's unclear how quickly prices will drop. Therefore, all electrification and renewable energy upgrades must be paired with thorough weatherization and energy efficiency improvements.

Financial Summary

The proposed Electrification Feasibility Committee should include a projected multi-year budget for city-wide electrification in its report to the City Council on November 1, 2021. This appraisal will assist

the City Council and Longmont residents in assessing the urgency and feasibility of electrification. The report should address the realities developers, homeowners, and homebuyers will face (such as additional costs and fees for larger transformers, house panels, and energy-efficient appliances) with respect to the creation of new subdivisions of all-electric homes.

This report should also address the costs that LPC will face in increasing city substation capacity. For instance, an initial appraisal by Efficiency Works™ suggests that "Transformer upgrades in areas with overhead electric services will experience difficulties due to pole crowding and excessive weight from the installation of larger transformers." Pole change out, adding more poles to accommodate additional transformers, or conversion to underground facilities will be needed in older neighborhoods. In addition, conversion from overhead facilities to underground can create problems with available space and easements necessary for equipment placement.

Marketing, training, and incentives
The committee's report will include an outline for necessary marketing efforts, training needs, and uptake incentives. Long-term success will depend upon coordinated planning and substantial investment in each of these three areas.

BE.3) Commercial Benchmarking Policy: This program is part of the Longmont Sustainability Plan. Promote the use of Commercial Building Energy Benchmarks to encourage owners and tenants to improve energy efficiency and lower waste

Recommendation Summary
The City of Longmont needs to implement a commercial building benchmarking policy. The policy should engage business and municipal building owners with a positive, transparent cloud-based solution to identify, analyze, & report on inefficient energy usage. The program should start with a comprehensive public business outreach campaign to educate building owners and get community buy-in. The initial launch will apply to buildings over 20,000 square feet. Long term, the City should expand the benchmarking policy to include all nonresidential facilities over 5,000 square feet.

The state may be implementing a building energy benchmarking program in the near future.

Objective
Based on results from other commercial benchmarking programs, the City of Longmont could reduce overall energy consumption in the commercial building sector by 2.4% per year, or about 7% over three years, through a building energy benchmarking mandate. This policy will be piloted by Longmont Power & Communications (LPC) in 2020 and implemented in 2021. The team recommends that the City adopt benchmarking as part of City Code, with penalties for building owners who do not report facility benchmarking.

Target

Launch a building energy benchmarking program to reduce overall energy consumption in nonresidential buildings by 2.4% per year or 7% over three years.

Timeframe
The pilot phase will begin in 2020. An ordinance for this policy will be developed in 2020 and should be adopted by the City Council in 2021.

In 2021, all commercial buildings over 20,000 square feet will be energy benchmarked. The list of energy benchmarking scores should be made publicly available.

In 2022, buildings over 10,000 square feet will be added, as well as multi-family buildings over 20,000 square feet.

In 2023, commercial buildings over 5,000 square feet and multifamily over 10,000 square feet will be added.

In 2024, multifamily over 5,000 square feet will be added.

Social and Economic Impacts
Building owners and commercial tenants will be impacted along with groups serving those customers, such as the Chamber of Commerce and Longmont Economic Development Partnership (LEDP). To ensure buy-in from these groups, the City should start with an "opt-in" pilot to identify any issues with the program process and show other businesses the economic value of monitoring and controlling their facility energy use. LPC will need to reach out to make the energy scoring relatively easy. LPC is working with Xcel Energy's Partners in Energy program to learn from the utility's experience with benchmarking programs in its other service territories.

Financial Summary
LPC will need one person dedicated to introducing this program and helping commercial customers. LPC currently has one staff person introducing the program. Additional funds for updating the website and making the information on benchmarking easily accessible and understandable is needed. Existing personnel can support this with additional funding of $20,000 for developing user-friendly information. Xcel Energy is committing support to this Program for facilitating the gas data use.

Marketing, Training, and Incentives
The City's website needs to be updated with easy-to-read marketing material and a program user guide. There should also be a link to FAQs. Account managers will need to go through a short training so they can discuss the program accurately with their clients. The benchmarking program lead staff member will host virtual and in-person workshops in conjunction with Xcel Energy to help customers learn how to use ENERGY STAR Portfolio Manager®.

BE.4) Commercial Energy Efficiency Improvements and Rebates: Expand existing programs, retrocommissioning and Performance Programs through Commercial Efficiency Works™

Recommendation Summary
Efficiency Works™ is an existing program noted in the Longmont Sustainability Plan. The team recommends that this program be expanded to include additional businesses. The Climate Action Task Force recommends that small, medium and large size commercial buildings in Longmont have increased focus on efficiency with rebates to help alleviate the cost of the improvement. A full listing of the program's current rebates and energy efficiency services is available on the Efficiency Works™ website.

Objective
The City of Longmont has co-developed a robust regional energy efficiency program, called Efficiency Works™, with Platte River Power Authority (Platte River) and the cities of Loveland, Fort Collins and Estes Park. This jointly managed efficiency program provides a wide range of advising, assessment of opportunities and rebates for various energy projects benefiting commercial buildings and businesses. Administration of the programs, contracts and rebate processing is performed by Platte River. Customer engagement is handled with joint marketing efforts and local efforts of Longmont.

Target
We recommend that efforts to reach Longmont commercial customers increase to 2% annual energy savings across the City's commercial building stock by 2025.

Timeframe
Currently the target in the Longmont Sustainability Plan is to achieve 1% energy savings per year. The Climate Action Task Force recommendation is by 2022 expand this target to 1.5% and by 2025 increases to 2% energy savings (kilowatt hours).

Social and Economic Impacts
Commercial customers are positively affected. Businesses of all sizes participate from the smallest to the largest. The rebates oftentimes offset the cost of the improvements by one-third to one-half of the cost. Contractors also benefit from additional work from these efficiency improvements.

Financial Summary
Efficiency Works™ is funded largely by Platte River, with additional Longmont Power & Communication contributions. Through the existing Inter-Governmental Agreement (IGA) with Platte River, Longmont has the ability to add additional funding to direct the work and focus of the programs. Rate increases could provide additional program funding.

Marketing, training, and incentives

The City needs to greatly improve and expand its outreach and promotion of Efficiency Works™. Key account managers need to do more outreach through the largest customers. An additional staff person, or funding for consultants, will be required.

BE.5) Increase Residential Efficiency Works™ Program Utilization

Recommendation Summary
The City Sustainability Plan includes the Efficiency Works™ program. This recommendation seeks to expand the program's effectiveness. The Climate Action Task Force recommends an increased focus on efficiency for Longmont's homes, helping more residents to get rebates that will alleviate the cost of energy-saving home improvements. These include lighting, heating/cooling, insulation, air sealing, windows, heat pumps, evaporative coolers and water heaters. A full list of qualifying improvements and their rebates can be found at https://efficiencyworks.org.

To improve engagement with residential customers, the Climate Action Task Force also recommends the use of home energy reports (such as those used by Fort Collins) to make all residential customers aware of their energy efficiency efforts relative to their neighbors' home of similar size and age in addition to more specific efficiency tips and opportunities. A Home Energy Report typically compares the energy costs of one household to another of similar size and age. It has proven to be quite effective in Fort Collins and Loveland. The Home Energy Report can also provide additional energy saving tips.

Objective
The City of Longmont has co-developed a robust regional energy efficiency program, called Efficiency Works™, with Platte River Power Authority and the cities of Loveland, Fort Collins and Estes Park. This jointly managed efficiency program advises customers, assesses the opportunities available to them, and provides a wide range of rebates for various energy projects benefitting their homes. Platte River administers the programs and contracts and processes the rebates. Customer engagement is handled with joint marketing and local efforts of Longmont.

Target
Longmont currently assists 100 homes per year through this program. The Climate Action Task Force recommends that these efforts increase to 400 homes per year by 2023. We propose to add home energy reports in 2021. The additional cost for this is about $150,000 and will require a full-time person to assist with data collection coordination with the City customer information program and to answer customer questions after implementation. The Climate Action Task Force believes that additional customers will be motivated to seek audits and improve their home efficiency.

Timeframe
For 2020, the goal is to reach 100 homes per year. This will increase to 200 homes per year in 2021, 300 homes per year in 2022 and 400 homes per year in 2023.

Social and Economic Impacts
Efficiency Works™ has a positive impact on residential customers. Participating homes earn generous rebates on helpful improvements that continue to save residents money and energy over the long term. Boulder County used its remaining funds through the ARRA grant to provide a buy down of the loan interest rate at two local banks in Boulder County. This is currently available to all Boulder County residents on energy saving projects. This obviates any need for on the bill financing by Longmont Power & Communications.

Financial Summary
Efficiency Works™ is largely funded by Platte River Power Authority (Platte River) with contributions by Longmont Power & Communications. Through our IGA with Platte River, Longmont can add additional funding to direct the work and focus the programs. The monthly home energy reports which help drive customer engagement at a cost of $6 per home. A customer can opt out of these. Once Advanced Metering Infrastructure is installed, additional depth and clarity of a customer usage will be able to be shared,

Marketing, training, and incentives
Much more effort needs to be made to inform the public of the savings available through improved energy efficiency. We recommend home energy reports (such as those used by Fort Collins) to make all residential customers aware of their energy efficiency efforts relative to their neighbors' home of similar size and age in addition to more specific efficiency tips and opportunities.

BE.6) Expand Low-Income Residential Energy Efficiency Programs

Recommendation Summary
The City of Longmont should expand the existing low-income residential energy efficiency program to 400 households per year. According to City data, an estimated 12,000 households in the City of Longmont have a high utility burden, limiting the residents' financial ability to improve the efficiency of their homes.

Objective: Increase energy efficiency in low-income housing to help the city achieve its renewable energy goals while ensuring social equity. The program should focus on giving each home a free energy audit, insulation, air sealing, a high efficient furnace (if required for safety reasons) and a new refrigerators if the existing unit is over 10 years old. The program should also seek funding for additional measures like electric appliances and smart thermostats. All outreach materials for this program will be in Spanish and English.

Target
In 2019, 32 homes participated in the low-income residential energy efficiency program, and the City is proposing to complete 40 this year. According to the National Renewable Energy Laboratory (NREL),

programs such as this save an estimated 2.65 metric tons of CO_2 per house per year. At 400 homes, this greenhouse gas reduction translates to 1,060 metric tons of CO_2 saved per year.

Timeframe

Beginning with the current level of 40 homes, we would plan to expand the program to 100 homes by 2021, to 150 homes by 2022, and to 200 homes by 2023. The full program capacity of 400 homes would be reached by 2025.

Social and Economic Impacts

The greatest impact will be to Longmont's renters and homeowners, who live in single-family homes, who will have more comfortable homes, greater energy savings, and education on how to focus on energy efficiency and the required home maintenance. This program will need additional contractors, as there is currently only one contractor serving the four communities of Longmont, Loveland, Estes Park and Fort Collins. This in turn will require workers who will be trained on the job, which may provide employment for some residents in this program. In addition, Energy Outreach Colorado will need to increase its staffing in order to process the increased number of applications and coordinate with the local families and Platte River Power Authority (Platte River), while Longmont Power & Communications (LPC) will need to add one employee to serve the expanded program.

Financial Summary

The average cost is $4,000 per renovated home and $2,000 per renovated mobile home. Typically Xcel Energy and Energy Outreach Colorado each pay for about 25% of these costs. LPC through Platte River provides for the other 50% of costs. Growing this from 40 to 400 homes will require all parties to come to the table to confirm that they can continue the same share of funding. If we assume a mix of 90% single-family homes and 10% mobile-homes, the program will require $380,000 for 100 homes, $760,000 for 200 homes, and $1,520,000 for the full 400-home target.

Under the new Boulder County Sustainability tax, county commissioners are expecting that the City of Longmont will provide $2.3 million of revenue. Currently, Boulder County has pledged to fund up to $125,000 for sustainability programs, technically 6% of the total tax revenue to the municipalities, based on population, which for 2020 is about $125,000. The Climate Action Task Force recommends that the City of Longmont engage Boulder County in collaborative talks to secure additional revenues for this program, which will enhance social equity and reduce greenhouse gas generation.

Marketing, training, and incentives

All materials need to be in both English and Spanish. One additional program administrator will be hired at the City of Longmont to handle outreach, education and communication. Some outreach will be done in targeted neighborhoods. The City will continue its current coordination with the Community Services Housing Rehabilitation program.

BE.7) Create a Climate Action Fund: Secure grants, sustainability dollars, and other sources to assist in funding the above programs, paying competitive wages to the program staff, and contract workers.

Recommendation Summary
The City of Longmont should establish a Sustainable Climate Action Fund to assist low- to middle-income building owners, both residential and commercial, in the transition to meet the City's mandated electrification/renewable energy goals.

The Fund should be established through a mix of public and private funds, fees and taxes, and the City should leverage those funds to bring additional resources to the table.

The City should continue to support and expand already-existing rebate programs and incentives for building owners, including Efficiency Works™, Colorado's Affordable Residential Energy (CARE), and the Boulder County Sustainability Tax, into which Longmont residents pay approximately $2.3 million annually.

A full-time permanent grant coordinator should be hired to write environmental sustainability grants and solicit other public and private funds from the State, Federal government, major donors, corporations, private foundations and banks, in order to establish and grow the Fund. At least one other staff person should be hired to examine the feasibility of additional financing/loans for wealthier or larger building owners in Longmont, plus guide the City on investments to funnel dividends into the Fund, and/or research and implement the levying of a new tax for the Fund.

Objective
The aim is to minimize, if not eliminate entirely, the financial burden on lower-to-middle income building owners in the City in the transition to 100% electrification and renewable energy by 2030. Funds can be used to supplement costs not covered by already-existing City programs, or they can help those programs expand in scope.

Target
The Fund shall be researched, planned, staffed, launched and in operation no later than early spring 2021. City staff should make their recommendations on financial targets or goals for the Fund each year between 2021 and 2030, based on projected need.

Timeframe
Conduct research on developing and launching a Climate Action Fund from spring 2020 through mid-August 2020. Using this research, City staff should establish a funding plan for 2021 and beyond by mid-November 2020.

Social and Economic Impacts
The impact of the Fund is positive for residents and commercial building owners alike. Lower-to middle-income homeowners will be able to afford to make the necessary changes to their homes, and successive homebuyers will benefit from the lack of one additional factor to drive real estate prices beyond their reach.

Boulder County renters already are burdened by the cost of housing, and small- to medium-sized businesses are burdened by high commercial rents. The Fund will allow residential and commercial landlords to retrofit and electrify their buildings with minimal cost, so that additional burdens are not imposed upon tenants.

Lastly, the City cannot complete the mandate of 100% renewable energy by 2030 with its associated benefits without additional funding.

Financial Summary
Grants, Efficiency Works™ funds, CARE funds, and income from the Boulder County Sustainability Tax are all potential sources of funding.

Marketing, training, and incentives
The program needs a pre-emptive marketing campaign to inform residents, commercial building owners, and trade allies about what financing or funding mechanisms are available. Transparency is key and this should be a community effort.

One note: due to the low unemployment rate in the region, wages need to increase for workers doing weatherization of existing buildings in Longmont. Either supplement hourly wages via the Fund, or encourage (and provide technical assistance and start-up capital for) the establishment of worker-owned weatherization companies or cooperatives.

Education and Outreach

EO.1) Comprehensive Workforce Development

Goal/Objective
We recommend that the City of Longmont hire a Green Business Employer Council (GBEC) program manager. The GBEC would be a coordinated, green energy workforce development program for the community with three main goals:

1) Develop a comprehensive green jobs training program that includes career ladders for Longmont residents along job pathways offering stable employment and a livable wage.
2) Increase the number of green energy professionals to implement various municipal, commercial, and residential projects in support of Longmont's goal for 100% renewable electricity generation by 2030.
3) In order to build a diverse and inclusive workforce in the green energy sector, a percentage of the workforce training program should equal or exceed the percentage of racial minority communities in Longmont.

Recommendation Summary
To address the long-term climate change emergency in a viable and sustainable way, Longmont must tackle a crucial set of workforce-related challenges that can benefit all involved. This Comprehensive Workforce Development Program will be key to the success of other Climate Action Task Force recommendations. It has the specific goal of using training and incentives in both the public and private sectors to expand and improve Longmont's climate action workforce, addressing home energy and weatherization needs by doubling the number of trained full-time workers and contractors within the next three years. Currently, there is a significant shortage of contractors in this field, and a need for technicians, engineers, electricians, and other relevant types of workers. To address these needs, a timeline is provided below for a phased initiative that starts with hiring a staff person, expands to planning by a core group, and then sets up an ongoing Green Business Employer Council (GBEC) by the end of 2020.

Target

<u>Specific</u>
A Technical Advisory Committee (TAC) made up of active industry professionals will spearhead most GBEC efforts. The TAC will help set standards for instruction for the program, determine participation requirements, identify key skills missing from the local industry, select training locations, and identify possible career paths.

Efforts should be made to build upon already-existing training opportunities, and to determine indicators and measurements of success for the workforce training program. In addition, it will also be

important to connect trainees to industry-wide certification programs such as RESNET's Home Energy Rating System (HERS). *A certified RESNET HERS Rater conducts energy efficiency audits for residential buildings to determine their current efficiency and identify energy savings projects.*

Central to this initiative is a climate justice commitment to give high priority to low-income and unemployed workers and to those local residents who have lost viable jobs due to the economic disruptions of 2020 or to rapid changes in the area's oil and gas industries. Overall, the goal is to develop not only entry-level jobs, but also a wide range of full-time living-wage jobs that support advancement.

Areas of training should include at least the following, with the exact coursework based on each incoming participant's existing education:

Basics

1. General arithmetic, ESL/English literacy; Workplace skills including interpersonal interactions, customer service, and conflict resolution, diversity/sexual harassment training; Career support through interview practice and resume assistance
2. Technology and internet literacy, including basic programming skills and software/hardware troubleshooting
3. Financial literacy training for subjects like credit, savings, assets, budgets, debt, and banking
4. Environmental justice education

Construction industry skills

1. Basic construction skills - welding, vehicle operation, etc.
2. OSHA safety
3. Energy efficient new construction, both nonresidential and residential
4. Code compliance training

Residential contractor skills

1. Residential energy audit/HERS training
2. Residential weatherization, energy efficiency upgrades, and electrification projects
3. Installation/conversion of pipelines and meters to transition to 100% electric infrastructure

Renewable energy industry

1. Training in solar, wind, geothermal, and other renewable energy generation system design and maintenance
2. Installation/conversion of pipelines and meters to transition to 100% electric infrastructure

Advanced/other

1. Electric vehicle mechanics and software
2. Classroom and on-site training in small business operations and entrepreneurship
3. Opportunities to continue education at Front Range, Trade Schools and 4-year colleges

Measurable
Standards of success should include not only program completion, but also industry certifications, job placement, job retention, further education, and career ladder success. Demographics should be collected and measured. The Center for Construction and Research Training has developed a Workforce Sustainability Report (2019) that offers a viable framework for assessing social sustainability in any workforce development industry. For economic impacts, the City can use local statistics on employment, household earnings, and value added in the clean/green industry.

Achievable
Local, state and federal funding sources can and should be leveraged to fund this program. The program should start with existing funding partners like local trade schools, St. Vrain Valley School District (SVVSD) or Front Range Community College (FRCC), or funding through the Workforce Investment Act (WIA), or local Workforce Investment Boards (WIBs).

Incentives should be offered to those businesses willing to be part of the GBEC or TAC, as well as to those businesses willing to hire or provide apprenticeships to program participants. Workforce Boulder County (WBC) has an existing program.

Relevant
The US Department of Energy estimates that every $1 spent on weatherization, results in a $2.73 estimated return on energy and non-energy related benefits to the community. Longmont's growing list of green energy employers can rely on this program, knowing that this training process was performed using an equity lens and that they are hiring properly screened, assessed, trained, and supported workers. This effort will offer stable jobs, speed the reduction of greenhouse gases, and help to build stable and living wage jobs for disadvantaged and displaced workers.

Time-bound
Two complications make the proposed timeline uncertain. The City is currently in a hiring freeze due to COVID-19 and its unclear when hiring will/can resume. And since Longmont budgets out new positions in May the year before, it might not be possible to hire the GBEC coordinator until 2022. Under these assumptions, the Climate Action Task Force presents the following timeline:

- Summer 2021:
    - Hire a staff person to research and convene a small, diverse Green Business Employer Council (GBEC). The employee should have existing knowledge in the green energy sector, connections with key community stakeholders, and an understanding of energy efficiency and green energy workforce shortages/opportunities for growth in Boulder County.
- September through December 2021:
    - The GBEC City staff member will identify and bring in members for the TEC. This group can reach out to get support for the Council from local green energy industry leaders, the

SVVSD, FRCC, Workforce Boulder County, area nonprofit organizations, local/regional trade schools, and relevant labor unions. This combination of the City staff member, TEC board members, and community partners will form the overall GBEC.

- January-August 2022:
    - The GBEC will design and promote a Workforce Development Plan for green energy, recruiting both employers and participants for the program, and arranging sites for a coordinated kick-off in the fall of 2022.
- August-December 2022:
    - The program will begin training the first cohort of participants, focusing on filling spots with Longmont residents who meet one or more of the following criteria: low-income, unemployed/underemployed, previously incarcerated, single parents; without a GED or high school equivalent, speak limited or no English. Given this approach and to make the process equitable, augmenting skills should probably be taught first, before going into very specific/technical skills. Then training will focus on weatherization/auditing/ retrofitting of existing buildings, plus other hard-skills priority areas as listed above.
- January 2022 forward:
    - The program will continue to expand and improve, responding to local needs of the City's businesses, homeowners and job seekers. It should gain momentum as successes mount and word spreads that Longmont is succeeding in expanding its workforce and addressing the Climate Emergency.

Social and Economic Impacts

The jobs available for graduates of this specific workforce program must pay decent/livable wages for Boulder County and offer good benefits. There must be a realistic and flexible career ladder clearly outlined, and sufficient training and certifications must be provided. Through the GBEC, applicants should be able to expect such things as soft skills training; paid training/internships; and relationship-building for future steady employment with local green energy companies.

For maximum social and economic impact, the programs sanctioned by the GBEC must offer support and connections with wrap-around case management assistance such as transportation, English language instruction, substance abuse counseling, mental health services, and/or child care. In addition, provisions will need to be made for job/career-related support once participants "graduate" from the program.

See the Measurable section above to ensure the program is evaluated for both social and economic metrics.

EO.2) “Big Picture” Climate Lecture Series

Goal/Objective
In addressing climate change, public awareness among an informed public is crucial. Community understanding is central to the success of shared policy ideas. Moreover, deeper historical and cultural understanding is crucial to that public awareness. We recommended the City continue to support an ongoing initiative to offer a series of five public lectures/film screenings at the Longmont Museum beginning in early 2021.

Recommendation Summary
This series, entitled “Our Climate—The Big Picture,” will offer five well-publicized free presentations and discussions on Sunday afternoons in the Longmont Museum’s 250-seat Stewart Auditorium. The goal is to raise awareness and foster discussion regarding the climate emergency that faces Longmont and our planet.

The program already has funding for the first five presentations and based on the success of the initial year’s program, the series could become an annual city-funded event. The “Our Climate—Big Picture” Lecture Committee has already started coordinating with the Museum Events Manager Justin Veach. The committee includes two teachers from St. Vrain Valley School District (SVVSD) and Front Range Community College (FRCC), two CU professors who are Longmont residents and members of the Climate Action Task Force, and the senior environmental historian chairing the CU-Boulder History Department. It will also include a member of the City’s sustainability staff, since they oversee Longmont’s climate action efforts and can bring the broader equity and engagement lens, as well. Connections will be made with the Longmont Public Forum, Longmont’s Just Transition Plan (JTP) Committee, and Sustainable Resilient Longmont (SRL) to gain their participation and support.

Target

Specific:
Run an “Our Climate—The Big Picture” series of five well-publicized free presentations and discussions on Sunday afternoons in the Longmont Museum’s 250-seat Stewart Auditorium.

Measurable:
Attendees to each lecture series should be asked to fill out a survey to provide feedback on their experience. The survey should include at least the following:

- Demographic information
- Qualitative questions:
    - How did you hear of the series and how many presentations have you attended?
    - What did you learn tonight, and how will you share this information?
    - How seriously do you take the Climate Emergency, both locally and globally?
    - Should Longmont continue this educational endeavor, and how can we expand it?

Achievable:
The COVID-19 crisis could require large in-person events to be delayed in early 2021. In this situation, Justin Veach, the Museum's Auditorium and Events Manager, can work with the group to plan a small live-audience event with social distancing with an online, live-streaming option via Facebook or Zoom. The event could also be recorded for repeat viewing on the Longmont TV channel or city website.

The program already has $5,000 in funding through an outreach grant from CU-Boulder's Center for Humanities and Arts (CHA), awarded in April 2020 and available for one year. The grant will cover publicity outreach, speaker stipends, event security, lecture handouts, auditorium projectionist, and technical help.

Committee members will focus on presentations that balance broad climate education and themes or topics with particular relevance to Longmont's community, including addressing environmental justice issues that different sectors of the community may face. Drawing a diverse crowd may only be achieved if there is targeted content that has direct relevance to people's lives now.

Potential speakers include James Butler, Head of the Global Monitoring Division at NOAA, who has a presentation called "Carbon Dioxide, Climate Change, and Human Civilization." Other local environmental leaders include Rafael Salgado (CalWood), Irene Velar (Americas for Conservation + the Arts), Carlos Fernandez of the Nature Conservancy, and Joe Salazar, the director of Colorado Rising. Outreach for the series should include diverse organizations such as Native American groups, El Paso, Intercambio, Suma Latina, and others. In addition, the committee will **prepare a list of recent and relevant climate films** (such as *The End of Ice*) that could be integrated into the series and used by local teachers.

Relevant:
Nothing is more crucial to mitigating and responding to climate change, both at the local and the global level, than broad public awareness of the climate emergency we all now face. This program is part of a larger educational effort to increase public engagement and understanding in Longmont and the Front Range region.

Time-bound:
Planning will begin in June, and the first Sunday event will most likely occur in January 2021. (The eventual course of the Covid-19 epidemic may mandate certain changes and adjustments.) By **August 1, 2020** (before the academic year commences), spring 2021 event speakers and titles will be finalized. Plans for the Big Picture Climate Series will appear in the Longmont Museum's Fall and Spring schedules.

Starting in the fall, the Committee should make plans for postering (and using any other promotional vehicles) at Longmont Library, SVVSD, City public facing facilities, and local businesses. Other support

services (both in-person and online) could be tapped in order to reach minority /diverse /underserved communities. Social media and use of bilingual messaging - through the City, the University, the Museum and libraries - will be especially relevant if we continue to follow physical distancing guidelines.

By May 1, 2021, the Committee will prepare a report for the CU grantor on the effectiveness of the program, appraising how the response has been to-date. This submission could lead to a grant renewal.

In addition, if a yearly series appears feasible based on the effectiveness of the initial series, this same analysis of the program in early May 2021, could lead to a request for future Longmont support, (since the City begins budgeting in May of each year), in an effort to expand a meaningful public event.

Social and Economic Impacts
This project is a low-cost initiative designed to have a ripple effect. It will raise public awareness and challenge citizens to become more engaged in Longmont's significant efforts to address the full implications of man-made climate change. Though small, this awareness program will help to build community engagement, conversation, and understanding.

EO.3) Climate Change Article Series

Goal/Objective
The goal of this outreach effort is to develop a series of 10 to 12 short human interest stories from across the long history of energy use on the Front Range to provide the public with relevant historical and scientific perspectives and contexts concerning the Climate Emergency.

Recommendation Summary
These public interest essays will draw on history and science to help Longmont residents see and discuss the current climate emergency in a broader context. It will make abstract issues more relevant and accessible by tying them to specific changes regarding energy use that have occurred in our own area over time. All these changes are connected in intriguing ways to shifts in Longmont's public health, air quality, and transportation patterns. The series will dramatize the so-called "hockey stick effect" by showing how here, as elsewhere, human energy consumption has changed and expanded exponentially, shifting our lives for better or worse.

Target

<u>Specific:</u>
Longmont Museum's historical archive has excellent resources to explore and explain the evolution of energy use in our area. A small committee (involving the collection's Archivist, a Museum staff member, at least one historian from CU and from FRCC) should be able to map a feasible schedule and

a flexible topic list for a dozen articles throwing light on key phases of energy development in the region. All will be illustrated and will stress the local and social side of the story, along with scientific implications. Each piece will relate to the question of how our community and our country got to the place we are in today, where the unforeseen consequences of unprecedented fossil fuel energy use endanger the planet.

Measurable:
Conveying, and the measuring, awareness of the origins and extent of man-made climate change is never easy, but the metrics for measuring the success of this small intervention can be considered in terms of three phases: Creation, Reaction, and Expansion.

Successful *creation* will hinge on forming a committee, executing the research and writing, and placing the series with a widely circulating publication before the end of 2020.

A successful *reaction* will involve measuring the circulation of the series and assessing the public interest and comment that it is able to generate during the first half of 2021.

After that, successful *expansion* will hinge on whether the articles see continuing use in local schools and museums, and whether an ongoing educational series develops.

Achievable:
Costs to implement this recommendation should be minimal, since authors will be volunteers. The work of drafting and editing can be done at home, even if ripple effects from the current pandemic persist. Moreover, significant research materials, both written and visual, are available online.

Possible personnel may include Longmont Museum's archivist, Erik Mason, CU-Boulder historian Peter Wood, and Professor Andy DeRoche who taught American environmental history at Front Range. While the intended audience will be the general English speaking public, a priority involves a Spanish-language version of the series. Efforts will be made to work with Colorado Newspapers in Education, (NIEonline.com) to see that these materials appear in the e-editions of local papers that are made available for use in area classrooms.

Relevant:
Recent social science research confirms that the more informed residents are about climate issues, the more willing and able they are to support well-reasoned large-scale policies for reducing the harsh impact of global warming.

Time-bound:
Interested members of the Climate Action Task Force familiar with Longmont history should take the lead in creating a volunteer drafting committee. Securing a print and on-line outlets will be accomplished during the summer of 2020. These articles will be prepared between September and

December, and they will be placed in new and old Front Range media outlets over the winter and spring of 2021. This endeavor should not be hampered by the course of the COVID-19 pandemic or current instability regarding local media outlets and platforms. The creation and circulation of Spanish-language versions of these should have high priority. Ideally, these well-researched and engaging articles will appear in chronological order at regular intervals (such as every Tuesday), creating an ongoing story of how people in our region have relied on increasingly potent (and problematic) energy sources since the beginnings of the industrial era.

Social and Economic Impacts
This initiative will be scheduled to support and overlap with the "Our Climate – Big Picture" lecture and film series that has been fully funded for the Longmont Museum's Anderson Auditorium (probably on Sunday afternoons in the early spring of 2021). Whether the proposed articles appear before, during, or after that series, they will serve to increase attendance, broaden awareness, and spark discussion. Since the aim is for a thought-provoking and enlightening series, the initial focus will be historical and informative, rather than partisan and present-oriented. Hopefully, this series can be part of a larger effort to assist diverse local constituencies in finding common ground and shared understanding.

Democratic change hinges on broad understanding. As Abraham Lincoln once put it: "Public sentiment is everything. With public sentiment, nothing can fail. Without it, nothing can succeed."

EO.4) Longmont Museum Teaching Exhibit

Goal/Objective
"Front Range Rising," the excellent permanent exhibit at the Longmont Museum covering 15,000 years of local history, is a rich community resource visited by families, plus hundreds of area third-graders each year. It is an existing display that could be used effectively, in the context of our modern Climate Emergency, to introduce residents of all ages to the varied history of energy use in this area over time. This "Longmont Energy Overview" could be integrated with the existing exhibit to provide Museum visitors with more understanding of how we arrived at this Climate Crisis and how we can address it.

Recommendation Summary
Before creating expensive new tools to support climate change education, it makes sense to take full advantage of excellent resources that already exist. A perfect example is "Front Range Rising," the rich and compact local history exhibition at the Longmont Museum, already familiar to many area citizens. This permanent display makes Longmont's story accessible and allows visitors of all ages to consider Front Range History from a variety of angles. Creative museum staffers and volunteer docents have discovered that it provides an excellent and age-appropriate way for St. Vrain Valley School District third graders to get a sense of our community's origins and development over time, starting with this region's earliest inhabitants.

The “Front Range Rising” exhibit, long a highlight of Longmont’s Museum, offers a unique opportunity. The display is both informative and versatile, since it can be explored effectively to highlight a variety of themes—everything from women’s history and cultural diversity to our Longmont’s changing agricultural, commercial, and industrial history. Without changing anything, it therefore also lends itself to a well-organized energy/climate walk-through. Certain current features would come to the fore in chronological order (starting with a discussion of muscle power, water power, wood power and dog power for the first 14,000 years of human habitation in the region). Then comes horse power in the 18th c. (a cultural revolution for the Great Plains), followed in the 19th c. by the industrial revolution, tied to our region by the role (known to few) that buffalo hides played as industrial belts in eastern factories.

Then came steam power allowing for railroads, and electrical power prompting the telegraph, the telephone, and much else. As an energy source, scarce wood gave way to abundant coal, which eventually gave way to the seeming efficiencies of oil, gas and nuclear power. Now water and wind and solar power are with us again in new ways. “Front Range Rising” allows one to explore all this, pitched for any age, within a self-guided or docent-led tour. Whatever the format, consideration will be given to equity/environmental justice issues with reference to indigenous peoples and diverse immigrant groups. A “Longmont Energy Overview” connected to “Front Range Rising” could take many forms, such as an audio track, a pamphlet for self-guided tours, a short video, or a group walk-through with staff or docents. This initiative will begin with a working committee of interested staff and docents discussing and creating a brief narrative plus background sheets with facts and questions for docents and teachers. These discussions could help in the preparation of materials that would help parents and K-12 teachers, and they could also assist in planning for future renovation of the “Front Range Rising” exhibition. This initiative will depend upon Museum engagement, staff interest, and docent volunteer commitment.

If COVID-19 precautions make it difficult for busloads of students to visit for a while, it would be possible to create a fifty-minute, or twenty-minute, video walkthrough that could be used for online learning at school or home. If the exhibit undergoes expansion and renovation in the near future, as discussed, it would be possible to draw added attention to such features as the irrigation display, the horse carving, the buffalo robe, the pioneer push cart, the steam engine, the windmill, the sugar beet factory, the gasoline tractor, and other useful talking points.

Target

Specific:
Create a “Longmont Energy Overview” section in the existing “Front Range Rising” exhibit to provide Museum visitors with more understanding of how we arrived at this Climate Crisis and how we can address it.

Measurable:

The Longmont Museum keeps regular visitor counts and solicits feedback. It also works with schools in several school districts in the area to schedule and track regular on-site visits (in non-quarantine times) by school groups numbering between fifty and one hundred children on any given day. It will be readily possible to keep track of how many people this initiative reaches, and to incorporate useful feedback.

Achievable:
Costs will be kept to a minimum by using docent volunteers and by integrating these ideas with existing plans for updating "Front Range Rising." Discussions with Museum staff and teachers from SVVSD and FRCC are ongoing. The Longmont Museum has a sizeable membership and large mailing list. So it is already well positioned for publicizing its important changing activities and exhibitions. It also has well-oiled procedures for training new docents and for keeping track of individual and group visits and gathering and processing feedback.

An interactive 360 tour of "Front Range Rising" already exists on the Museum website. It is also available in VR headset options, such as "Google Cardboard" (which can run on iPhones 5s and newer, running iOS 9.1 and higher). It would be possible to develop a written or recorded guide for the exhibit focusing on Climate Education. The video at the entrance to "Front Range Rising" could also be used as a take-off point for making a climate-oriented introduction to the sweep of Longmont history.

Relevant:
This modest proposal represents an efficient and cost-effective way to engage with a wide cross-section of Longmont's public in an ongoing manner, particularly with school-age children.

Time-Bound:
As with some other Climate Action Task Force recommendations regarding Education and Outreach, this one does not involve major start-up costs. If sufficient commitment emerges, it could be undertaken mostly from home in the early stages, if quarantine persists, and it could engage Museum staff unable to tackle other tasks at this time. A committee to explore the idea could involve the Museum's experienced Curator of Education; docents familiar with the strengths of "Front Range Rising"; and interested members of the City's sustainability staff. This team should prepare a proposal, taking Museum staff time commitments into account, for the whole Museum staff to discuss and evaluate. Hopefully, if approved, this educational asset could be implemented for the Museum public over the next two years.

Social and Economic Impacts
Besides inevitable fiscal belt-tightening, the current pandemic and quarantine oblige us to think creatively about new ways for teaching traditional knowledge, and look for new opportunities for fresh teaching material and background information most-relevant to current and future generations. Young people are emerging into a changed world where the implications of global warming have been ignored or downplayed by older generations for too long. These rising students are anxious to be equipped with knowledge they will need to address our Climate Emergency effectively.

EO.5) Community Sustainability Liaison Program

Goal/Objective
Members of the community would serve as liaisons to promote sustainability through peer-to-peer awareness within neighborhoods around Longmont.

Recommendation Summary
The City should establish a Community Sustainability Liaison Program (CSLP) that will have trusted members of neighborhoods serve as liaisons to educate their peers on sustainability, renewable energy, and matters that address our Climate Emergency. These liaisons will talk to their neighbors and peers about items such as programs offered through Longmont, the benefits of renewable energy, how to save energy at home and at work, and ways to reduce waste. They will also advise people about using composting, obtaining rebates, and connecting to educational resources.

Liaisons can range from high school students to seniors which will help ensure messaging is gotten out to all communities across the city.

Here and elsewhere, this sort of peer to peer education has already proven effective, due to the fact that people make positive changes in daily activities not only based on what they know, but on the opinions, actions, and suggestions of their close, trusted peers. When liaisons are established, members of the community will know they can go to these people with energy and climate-related questions, or to seek more information regarding sustainability issues.

To maximize outreach and avoid duplicating efforts, Longmont can connect this program with the Sustainable Neighborhood Solution (SNS) and the Sustainable Opportunities, Lifestyles, and Leadership (SOLL) programs already in place in Longmont. This program should also work in conjunction with the Longmont Neighborhood Group Leaders Association (NGLA) to locate community groups already interested in sustainability.

Target

Specific:
The City should establish a Community Sustainability Liaison Program (CSLP) that will have trusted members of neighborhoods serve as liaisons to educate their peers on sustainability, renewable energy, and matters that address our climate emergency.

Measurable:
The City can poll different neighborhoods to see their interest in sustainability, awareness of current programs, and compare before this program is implemented and after. CSLP can ask participants how they heard about programs when they enroll in programs such as Colorado's Affordable Residential

Energy (CARE) or take advantage of rebates such as the ones through Efficiency Works™ to get new high-efficiency toilets.

Achievable:
This recommendation hinges largely on the City's ability to find volunteers to become liaisons in their communities. However, to get the maximum number of volunteers, the CSLP should give the liaisons incentives to join, and it should provide training on relevant topics. The CSLP should arrange networking dinners where liaisons can share with each other what is working in their communities, while also reporting what they need help with, and having their questions answered. To honor accomplishments and build group solidarity, CSLP should fund annual achievement awards.

The program must also work on recruiting a diverse cohort of liaisons from various socio-economic, age, and cultural groups.

Relevant
This undertaking will help educate Longmont residents about relevant climate change and sustainability issues. By informing neighborhood residents about the numerous sustainability initiatives the City is enacting, diverse citizens can become more aware and participate more readily in these programs. This initiative will help Longmont to reduce overall greenhouse gas emissions.

Time-Bound
Based on COVID-19 restrictions, this program could begin in the fall of 2020, when school is potentially back in session and social gatherings can occur again, or whenever that occurs. If effective, it will grow over time and take on a life of its own, linking more people to ideas and programs that help them and their city.

Social and Economic Impacts
This program has the opportunity to engage hard-to-reach communities and spread knowledge about Longmont's multitude of programs focused on reducing utility bills through weatherization, rebates for high efficiency, and energy savings techniques. Likewise, it will be of benefit to non-English speakers. Many such residents may not have been aware of local initiatives, or they may not have realized they could participate. Liaisons will empower residents to take steps to reduce their utility bills and also to become passionate about sustainability.

A successful liaison program can empower city residents with knowledge to make Longmont a more sustainable, equitable, and interconnected community.

Land Use and Waste Management

LW.1) Extending Agricultural Zoning

Recommendation Summary
Change zoning to allow for agricultural enterprises on residential properties. The zoning would allow for a portion of a property to produce food which can be sold locally at farmer's markets, roadside stands, or in any manner consistent with health and safety. Economic benefits include additional income for residents and job creation from implementing the program. Increasing access to local food could displace some current non-local consumption and lower the average carbon-intensity of our food supply through transportation emissions reductions.

Objective
This zoning change could be included with xeriscape transitions. Xeriscape is a landscaping method developed especially for arid and semiarid climates that utilizes water-conserving techniques. Allowing portions of properties to become gardens would reduce water usage by up to 90% if a drip system is required. Residents would be incentivized to move away from a grass yard if they could receive payment for the things they grow. A portion of sales would go to new jobs to verify that the food items are fit to sell to the public. Food tents for local foods could be set up at farmer's markets and other places in the city to sell the food. If widely adopted, this could substantially reduce the amount of fresh produce that is required to be shipped into the city from distant places, reducing emissions. The produce could also be purchased by local restaurants or even groceries. The change would also create a beneficial ecosystem for insects, which are known to be declining. The gardens could also be part of a program to rehabilitate soils. It is likely that neighbors would actually meet each other to trade "tomatoes for lettuce" etc., creating new positive community outcomes.

This goal is for any size property. Code would have to be adopted to determine what percentage of a property can be used for gardening, and where on the property (i.e. away from roads or pathways).

Target

<u>Specific</u>
Transition a significant amount of Longmont's idle land – used primarily for decorative lawns, or "wasted" in easements and right of ways, to productive, sustainably managed micro-agricultural land. This can include private property as well as public. A system for allocating public land will need to be developed. One model that's been suggested is "Adopt-a-plot" which could be administered similar to "Adopt-a-Highway" programs, which must be successful because they are ubiquitous.

<u>Measureable</u>
Success can be measured by adoption numbers and acreage converted, plus yearly yields determined by employees or companies who collect and monitor food quality.

Many people want to grow their own food and sell it for extra money. This model resembles Airbnb for gardening, but with positive outcomes for climate change – local food.

This is partly inspired by Switzerland, where everyone's yard is just one big garden, and everyone trades food and sells the rest. Whole villages are known to have zero incoming food shipments. The city can do it too! The water requirement is alleviated with high-quality drip systems, required to be in the program.

Example: https://www.bettergardens.ch/about-bettergardens.html

Achievable
The City already engages in programs similar to what would be needed to implement this. The code changes needed are within the skill sets of the City planners and the PWNR organization. There is already a desire for this among the residents, as evidenced by usage of Garden-in-a-Box, the popularity of Farmer's Markets, and the prevalence of backyard gardens, etc. In this case we are moving the public in a direction many already choose to go.

Relevant
Benefits relevant to climate change include:

- Reduced water consumption
- Reduced transport that consumes fossil fuels
- Diversification of plant stock providing resilience against catastrophic climate events that may wipe out monoculture crops
- More sustaining environment for pollinators.

Time-bound
Before the end of year two, the necessary regulations should be in place. Regulations need to be expressed in such a way that private landowners inside an HOA may still participate.

By the end of five years, one or more local co-ops should be in operation and providing an example that will inspire more neighborhoods and individuals to participate.

A goal for the end of the third year is to gain St. Vrain Valley School District's (SVVSD) participation, by rewarding middle and high school students' service hours for community gardening, and perhaps in other ways such as giving credit for plant eugenics projects, low-moisture gardening techniques, and the like.

Five years or more is required for this initiative to become part of the culture and for a robust local cooperative to develop. But we have something of a foothold in the popularity of the local Farmer's Market and institutions such as Ollin farms.

Social and Economic Impacts

Benefits – Provides an additional source of income through a low-carbon enterprise. It could increase the consumption of local food. Increase the diversity of plant life in residential areas (residents should be encouraged to grow rare crops) and foster pollinator habitat. Climate events can disrupt food supply, so small-scale gardens can help avoid food disruptions in the future.

Negative – Barriers to participation for multifamily building occupants or smaller lots could have an outsized effect on low-income households. Refer to the Social Justice section below.

Barriers – The cost of water could rise in the future. Drip systems are expensive to install and calibrate. Running a profitable, small-scale farming operation is time-intensive and requires training in agriculture and botany. Making local gardens cost-effective is difficult without training or support. At present, Colorado does not allow a municipality to regulate pesticides, but for this movement to be viable, dangerous pesticides would need to be prohibited where they might impact the community garden or farm.

Social Justice – The City could convert open space around apartment complexes and pocket parks in HOAs into community garden allotments for the property residents. City Sustainability staff or groups such as EforAll can help organize communities into cooperatives.

Financial Summary

Upfront costs include the city staff time needed to draft and implement code updates, engage with local residents to get support, and then launch a city-led initiative to promote the program. There are also large upfront costs for residents to start the program, and making the endeavor cost-effective is not easy.

An educational program and gardening programs should be implemented to teach about opportunities and possibly distribute seeds.

Marketing, training, and incentives

Many residents are already xeriscaping their lawns. As noted above, educational programs to get residents started will need to be funded. Locally viable seed stock will need to be identified and distributed. Conceptually, this is no different than the existing garden-in-a-box program, except that it has wider potential benefits than just reducing water consumption.

A workforce development program may be needed to gradually transform Longmont's lawn-care workers to partners in the community agricultural industry. This could begin with replacing sprinkler systems with lower-consumption drip systems, replacing sod with soil conditioned for agriculture, testing soil for contaminants that would preclude food production, and the like. The best agency for effecting this transformation may be the county extension services.

LW.2) Commercial and Residential Composting Initiative

Goal/Objective
The US Environmental Protection Agency reports that, on average, each ton of compostable material diverted saves about 0.7 metric tons of CO_2 equivalent in greenhouse-gas emissions. Therefore, increasing residential and commercial composting programs can significantly reduce the City of Longmont's carbon emissions.

Recommendation Summary
Currently, 19.36% of the households are subscribed to the City's curbside composting program. The goal is to increase that number to 75% of eligible households over the next 5 years.

The City also needs to find new ways to encourage nonresidential composting, especially in businesses with large composting potential like restaurants, breweries, and food processors. State law preempts the City from requiring these businesses to use municipal services, so to get businesses to compost would require leverage through ordinances that require nonresidential facilities to compost their waste, regardless of their waste management provider.

Specific
The following actions can help drive composting rates across the city:

- Offer the residents of Longmont two options for composting bin size. Currently the city only offers a large size tote for compost. The city needs to offer a small size tote option. This would allow people who do not produce much or have limited space to still have the option to compost.
- In addition to providing two tote sizes, the number of curbside yard waste pickups should be increased during the summer months.
- Provide comprehensive education and information about how to compost properly and its role in reducing household carbon emissions. The end goal would be to increase participation and minimize contaminants entering the compost stream.
- Design a new tote lid to clearly remind residents to minimize contamination with non-compostable waste.
- Make curbside composting opt-out instead of opt-in.
- Work towards the goal of requiring all commercial businesses that produce compostable biomass to compost these items. This is already part of the Sustainability Plan.
- Continue working with Saint Vrain Valley School District to increase diversion of student generated biomass. This is part of the Sustainability Plan.

<u>Measureable</u>
Increase the total number of households and businesses that compost to 75% in 5 years. Residential performance towards this goal can be tracked by the City's Waste Management Division.

Nonresidential performance will require a mix of City Waste Management data and reporting from businesses that use another waste management vendor.

Achievable:
Changing future composting policy to automatically subscribe to composting service unless they opt-out will grow the number of subscribers over time.

Additionally, pricing bundles of services so that residents save money by composting rather than filling up the trash bin will increase adoption among existing residents.

Relevant:
Statistically, 24% of total household waste consists of organic material, usually in the form of food scraps and yard waste. The average American throws away 1.3 pounds of food daily. When all that organic material is buried in a landfill, it breaks down anaerobically, producing methane, a potent greenhouse gas that pound for pound can be up to 85 times more damaging than CO_2 over the same time period.

The immediate benefits would be less organic waste entering the landfills. The long-term benefits would be less methane produced and entering the atmosphere. Compost can be used to generate revenue and help rejuvenate depleted soils. Ways to commercialize compost include:

- Mixing compost with other soils to create rich, commercially salable potting soil
- Pulverizing compost to make a spreadable soil conditioner/lawn fertilizer
- Capturing and using the methane generated by the process as a net-zero fuel

A large body of literature exists on how compost may be commercialized, including this guide: https://smartasset.com/mortgage/the-economics-of-composting.

Time-Bound

- By January 2021: Change compost policy from opt-in to opt-out.
- Require businesses who produce more than 10% organic waste by weight to retain a commercial composting service by January 2021.
- By Summer 2021: Make two composting tote sizes available with a clear easy to read lid.
- By 2025: 75% of total city households are composting.

Financial Summary

- Composting expansion would be funded by fees collected from residents and commercial businesses. Much of the infrastructure is in place to expand composting within city limits.
- Incentives to increase the adoption rate can be met through changes in the pricing structure and pickup frequency for all city waste services. This has already done to some effect with every other week trash pickup. Continuing to look at rates and pickup frequency holistically, the city can encourage residents to minimize trash volume by recycling and trash services to make composting more.

- The City can invest to revamp its education around proper composting practices to minimize contamination and potential rejection of compost collections.
- Explore opportunities for Longmont to reap more of the economic benefits of its compost production. This could include working with the City's composting service provider to sell compost and liquid and powdered compost-based fertilizers locally. Or offer a coupon for free compost for participating residents – again, this reduces short-term revenue but increases adoption.

Social and Economic Impacts
Benefits:
- Less compostable materials end up in the landfills, therefore less methane gas is produced.
- Compost can help rejuvenate soils.
- Organic compost would be available for farmers and gardeners.
- Potential revenue stream to offset the cost of running the program.

Barriers:
- Getting resident and business owner buy-in.
- Findings ways to minimize contamination.
- Financial impact on low-income households. Fees could be offset for a family with financial hardship with revenue generated from the sale of compost.

LW.3) Pay for Parking

Goal/Objective
Implementing a paid parking design for the entire downtown district corridor can reduce the amount of parking spaces required and encourage low-carbon forms of transportation to and from the area, including public transit, biking, and walking.

Recommendation Summary
The recommendation is to charge people to park/store their vehicle in the downtown area. Parking strategies can encourage visitors, employees and residents to park based on need and location, but all revenues generated to the program can go into: repaving with non-impervious pavement, building parking structures with residential and/or retail "wraps" to make better use of the land downtown, and creating car-free areas along parallel corridors to Main Street.

<u>Specific</u>
Parking strategies can encourage visitors, employees and residents to park based on need and location. With the right resources, education and outreach, this program could go into effect relatively quickly (1-3 years).

Strategies would include phased implementation, with paid-parking starting along the high-demand Main Street corridor (from 1st Ave to Longs Peak Ave) to start. The key to success is to have rates and

implementation strategies that ensure parking along Main Street "turns over" enough to always have 15% (industry standard) of the spaces open, per block, for customers. In this way, people who want the convenience of parking at the front door will need to pay to park. People who do not or cannot pay will have options in the Longmont Downtown Development Authority (LDDA) parking lots currently located behind the stores. To provide a level of equity, vouchers or validation could be provided for people without the means to pay, needing the front door parking location.

Pay for parking strategies are meant to:

- Keep a certain number (15%) of parking spaces available full time. This reduces the amount of time of driving around the block or to different blocks to find a parking space, reducing the amount of pollutants released simply waiting for spaces to open up.
- Provide locations for longer-term parking, via permits, for workers in the area. This strategy allows workers to have a reliable parking space for which to park, but not for free. This is critical as many people using the downtown parking permits today live within a short walk or bicycling distance of downtown. Putting a direct cost on the parking resources would require people to prioritize the need for parking with other way of traveling to their downtown work site. This action would directly support the LDDA view of "all roads/trails lead to downtown" and would work to shift mode choice for downtown workers. This would reduce the number of single-occupant motorized vehicles accessing the downtown.
- Provide the necessary resources to maintain the capital program, the labor/enforcement elements, and the enhanced features to better serve people walking or riding to and through downtown.

A strategy to provide free parking to workers, visitors and customers may occur through the use of small (low or no emission) shuttles with high-frequency (less than 10 minute frequencies) during rush hours. These shuttles would encourage workers and long-term visitors to park in outlying existing parking lots outside of the downtown. Riding these shuttles to work and shops reduces both emissions from idling Internal Combustion Engine (ICE) vehicles in the congested downtown and providing a more enticing means of using mass transit and alternative modes of travel. Such shuttles could be free to everyone, through the parking revenues collected through this program.

If residential areas such as the historic neighborhoods are included in the pay-to-park areas, some arrangement for issuing limited parking stickers to residents could be included. These stickers might be free for a limited time, but then a fee would begin to be charged for them.

Measureable

The measures of progress will be:

- The amount of open parking or additional capacity, compared to past measures of occupancy/use.
- Mode share shift from driving to walking/bicycling/transit ridership using count data.
- The reduction in traffic volume and pollution in the downtown due to reduction in car usage.

Achievable
Either the City or LDDA needs to establish a budget of at least $500,000 to establish the program. Going forward, revenue from paid parking will offset the costs of maintaining the program infrastructure and enforcement.

The pay-to-park system will need to include a comprehensive marketing and outreach strategy to explain the program, and its associated benefits, to city residents and visitors to downtown. Relevant City staff will also need training on how to monitor kiosks and enforce the program.

Relevant
Historical and anticipated population growth in Longmont is highlighting the need to find productive end uses for city land. This plan reduces the space needed for parking in the high-value downtown areas. This will free more space in town for climate-mitigation projects like green space or renewable energy generation.

Limited parking also reduces traffic congestion and the associated greenhouse gas emissions and pollutants. It could also encourage residents to shift to low-carbon transportation methods like electric buses, biking, and walking.

Time-Bound
It should take about one to three years for full implementation of a downtown paid parking system. The COVID-19 crisis might delay the project start time beyond 2021.

Social and Economic Impacts
Insights into potential social impacts of paid parking came out of collaboration between the Climate Action Task Force and the Just Transition Plan Committee. One concern is the potential for increased parking on residential streets near downtown in response to the new program. One solution would be to impose permit parking on those streets for residents. Also, paid parking is a regressive economic tax: the cost of convenient parking decreases as a percentage of a person's overall budget as their wealth increases. Offering more low or no-cost shuttle service to key downtown locations can help make sure that all residents have convenient access to downtown. People with mobility constraints who can't walk or bike downtown could also bear an undue economic burden if they always have to pay to access downtown amenities. One solution would be to set aside a few free parking spaces or parking validation for vehicles with an eligible handicap permit. Making sure that shuttle buses have enough special seating and wheelchair spaces will also help ensure that all citizens can afford to access the downtown area.

Renewable Energy

RE.1) Smart Meters on Every House

Recommendation Summary
The majority of households and all commercial and industrial sites in Longmont need two-way communicating electricity meters (smart meters). A deployment of these meters and the supporting network equipment and software is called Advanced Metering Infrastructure (AMI). AMI is essential if Longmont wants to reach 100% renewable, reliable electricity generation by 2030 cost-effectively.

Smart meters make it possible to monitor the electricity consumption of every house in real time, and transmit that data to both the homeowner and Longmont Power & Communications (LPC). There are numerous software platforms available that can take these data and synthesize them into energy summaries that are easy for customers to understand, and offer customized energy efficiency tips or sources of energy waste within the home. These tools also provide estimates of how much customers can save on their electricity bill by completing these recommendations. LPC will use the same energy-use information, stripped of personal details and bundled appropriately, to balance supply and demand for energy, maintain and improve the distribution grid, and ultimately help turn Longmont into a zero-emissions city.

This committee recommends that the city complete the smart grid rollout as soon as possible.

Objective
Over time, every house will need to have AMI infrastructure and be all-electric (no natural gas appliances) in order for the City to balance electricity supply and demand on a 100% renewable grid [See recommendations RE.2, RE.3 and RE.5].

Smart meters and real-time energy data are the first step along that path. This can all be done by making available the data acquired by the smart meter to the owner or renter of the house via a mobile phone app. The data needs to be easily understandable and presented in a way that incentivizes the user to improve their energy consumption practices. This can include both the economic benefits of energy efficiency, as well as gamification/social norms through home energy reports or high bill alerts.

Target
Roll out smart meter installations by the end of 2020 with a project deadline of 2022. The supporting software installation shall begin as soon as possible. [This may already be under way.] Launch a pilot of installed AMI with the selected software for a subset of the city in the first quarter of 2021. Once any issues are resolved in the pilot, complete a full rollout of both AMI and supporting software by the end of 2022.

Timeframe
Start January 2021 - end December 2022

Social and Economic Impacts
The cost of the AMI network and supporting software (Customer Management System, Meter Data Management) has already been budgeted and incorporated into new rates enacted in February 2020. The tiered rate design is socially responsible, based on user class and consumption. Low consuming households, which typically correspond to low-income households, pay the lowest rates. Similarly, high consuming businesses and households pay higher rates. This not only finances the AMI network, but also encourages responsible consumption.

Features such as prepay, time of use (TOU) rates and other budgeting options should become available to consumers. This will allow all households to limit the unnecessary consumption of energy, time use of electricity to when rates are lower, and therefore spend less. Energy consumption has a low cost in percentage for higher-income households and a higher impact for lower-income households.

Financial Summary
The financial impact of the Advanced Metering Infrastructure was studied in 2019 and resides in Longmont's 2020 budget and the final report from LPC to the City Council. LPC must report on progress of the RFP or procurement process at the earliest possible date. Cost advantages may result from the economic downturn. Recovery grant funding may also become available from the Federal government.

Marketing, training, and incentives

- Train field operation for installation
- Design the pilot
- Education and outreach to the public first to pilot participants and second to the whole city

RE.2) Home Energy Management Systems

Recommendation Summary
Data will be a vital part to any solution to make the city of Longmont more energy efficient and wiser in its use of electricity. Energy Management Systems, coupled with AMI, provide the infrastructure needed for customers to easily manage their building/home energy use.

A Home Energy Management System (HEMS) is a network of communicating end-use technologies. Examples include smart thermostats on HVAC and hot water heaters, EV chargers, smart plugs that can control power or turn off other devices in the home such as lighting and electronics, and smart appliances like dishwashers, laundry equipment, and refrigerators. These technologies can be connected to a home energy hub, which can control each technology through a central software platform/mobile app.

An Energy Management System (EMS) is a municipal area network (over the internet) and software application that aggregates HEMS throughout the city and communicates with them to match supply and demand on the grid.

Objective
Offer incentives to get residents to invest in smart devices and HEMS, and create an opt-in system allowing Longmont Power & Communications (LPC) to manage energy usage at peak times. With the right approach and involvement of residents, Longmont can continue to offer low electrical costs to its residents.

Target
- Enable time-based or supply-based rates for electricity use for all customers.
- Create incentives for LPC customers to invest in HEMS.
- Mandate that (probably by code) all thermostats and water-heaters in new buildings must be smart and able to communicate with LPC.
- Incentivize the adoption of communicating devices in existing homes by favorable rates and group buying programs.
- Study how LPC can collect usage-data from HEMS to understand citywide electricity usage.
- Create an Energy Management System (EMS) pilot in at least one neighborhood by 2022.

Timeframe
- Short (end 2022):
    - Create incentives for adoption of communicating devices
    - Enable time-based rates
    - 5% of LPC customers have HEMS
    - 10% of LPC customers have smart thermostats or water heaters
    - Have at least one EMS-integrated neighborhood
- Medium (end 2025):
    - Adequate understanding of city-wide electricity usage
    - 15% of LPC customers have HEMS
    - 30% of LPC customers have smart thermostats or water heaters
    - Progress to more EMS-integrated neighborhoods based off data from the pilot program
- Long (by 2030):
    - 50% of LPC customers have HEMS
    - >75% of LPC customers have smart thermostats or water heaters
    - Multiple neighborhoods (and individual homes and businesses) fully integrated with a local EMS system.

Social and Economic Impacts
Impacts are likely most felt by low-income customers. With time-based electricity costs, those who either manually adjust their thermostats/water heaters (or those with smart versions) will be able to

reduce their monthly electricity bills relative to those who do not. Most of the technologies that make this process simple for customers are high-cost. Therefore, installations and training on how to use smart thermostats and other smart appliances should be added to LPC's existing low-income weatherization program.

A city-wide Energy Management System for all HEMS acts as a pseudo-battery: customers can specify how willing they are to have their appliances (thermostats, water heaters, EV charging, etc.) controlled during peak energy demand events. Allowing the EMS to cycle power usage directly can help keep rates low for all customers. However, participants could receive an incentive, such as a decrease in their electricity rate.

Financial Summary

The Council can determine whether it is worthwhile to make funds available to reduce the cost of HEMS and smart thermostats for all consumers, or whether giving them to low-income families would produce better results and create social equity. Both programs are worth pursuing, at least as studies.

Pilot programs for EMS integrated neighborhoods can be financed via any number of state, federal, or local instruments including public-private partnerships, tax-based incentives, and grants. Grants introduce more delay in implementation than other mechanisms, but may become plentiful during an all-out effort to restore the now-damaged economy.

Homeowners receive direct benefits from having a HEMS, in the form of convenience and lower rates. The larger EMS also delivers benefits to participating households, but also to all ratepayers. Longmont's ability to manage its electricity demand, lowers costs for the entire city by reducing demand charges from Platte River Power Authority, and making use of electricity when it is cheapest and least carbon-intensive.

Marketing, training, and incentives

- **Outreach and understanding** for all involved is paramount. People need to understand what energy management is, how they participate, and how they will benefit.
- **Train appliances vendors** on how to communicate the benefits to themselves and consumers of communicating devices. Ensure that over time they are working with the city to increase adoption.
- **Develop a workforce** of technicians who can help deploy the new technology. Work with the just transition initiative to ensure that this effort reaches low-income, low-skilled residents.
- **Incentivize adoption** of HEMS in households and encourage HEMS owners to join the city's EMS. Favorable rates and group buy programs will increase interest. The city may also subsidize or give away basic HEMS equipment such as communicating thermostats and water heaters.

RE.3) Energy Savings & Peak Load Reduction Program

High Level
As the City transitions from fossil-based energy sources to renewables, it will be necessary to adjust demand for electricity to align with when renewables are generating that electricity. The more the City can align consumption with renewable generation, the more cost-effective the transition to 100% renewables will be. If the City doesn't align most of our consumption to the renewable supply, the City will need to rely on battery storage capacity or renewable energy from other markets to maintain carbon-neutrality. And if those backup options are not available, fossil fuel generators and other carbon-intensive backups would be the only option to maintain reliability.

The most cost-effective solution to this problem is to create an Energy Savings Program for individual customers to save money on their electricity bill by helping match their demand to meet supply dynamically. In an Energy Savings Program, an individual can decide whether they are willing to have their electricity use adjusted and by how much. They can also decide when to opt out temporarily of this control based on circumstances. Longmont Power & Communications (preferably), Platte River Power Authority, or even a third-party Energy Management Company could run the system.

For program participants the system will:

- Reward those based on savings realized.
- Rotate individuals who benefit so the same individuals are not always selected.
- All information regarding energy use and rewards will be available at any time to the ratepayer.

A "reward" can be in the form of reduced rates or a rebate.

To be able to join this system, the customer would need a Home Energy Management System or one or more energy communicating devices like thermostat, water heater, plug, electric vehicle Charger.

RE.4) Develop Carbon Intensity Signaling Protocols

Recommendation Summary

Transitioning to 100% renewable energy while maintaining equitable rates and reliable power quality will require increased data collection and communication between Platte River Power Authority (Platte River) and the City of Longmont. To shift Longmont's demand for electricity to mirror the supply of renewable resources, and avoid peaking demand when renewable generation is low, we need to develop signaling protocols between the City and Platte River, and within the city itself.

Carbon intensity signaling is a specialized protocol that is sensitive not just to the total energy supply, but also to the carbon penalty associated with that supply. Early studies suggest that this can help shift

demand patterns rapidly during the transition to renewables and adjust to a growing percentage of clean electricity in that supply.

Carbon intensity is one approach to a signaling architecture between the generation and transmission (G&T) utility and the municipal utility. Other, simpler signaling protocols exist, but aren't as sensitive to carbon reduction in an Energy Imbalance Market context. Because our goal remains to achieve 100% non-carbon generation by 2030 or sooner we propose a carbon intensity approach. The four cities may decide on another signaling architecture.

Objective
Platte River needs real-time data on the relative carbon intensity of its generation (Tonnes/MW, etc.). In turn, the City of Longmont needs a signaling protocol to encourage residents to use (demand) electricity during times when the carbon-intensity per kWh of electricity (supply) is lowest. This will improve utilization of renewable energy and give Platte River confidence that increasing the renewable supply is the right investment.

Target

Specific
Develop Platte River-level systems to measure the real-time carbon intensity of its energy supply mix and convey the data to the City of Longmont. Develop city-level signaling protocol(s) to align energy demand with low carbon-intensity generation supply.

Measureable
It's unclear what data/tracking capabilities currently exist at Platte River. (See the letter from Platte River COO Andy Butcher incorporated below.) In the City limits, meter-level consumption data is already available, but not in real-time. AMI deployment is a prerequisite for an effective carbon signaling system.

Achievable
A number of consulting firms in the energy utility industry have software capable of measuring real-time carbon intensity for a given electricity generation mix. If Platte River does not already have internal software, they can enlist the help of one of these groups. At the city level, time-of-use or real-time electricity pricing to incentivize low-carbon electricity consumption and penalize high-carbon electricity consumption will require AMI meters to be most effective. Disaggregation algorithms, while inaccurate, could be used in the interim.

Relevant
Building energy use in 2016 contributed 68% of the City's carbon emissions, or approximately 730,000 metric tonnes. Longmont will need to consume more of its electricity during the times of day when solar and wind generation are highest.

Time-bound
Platte River carbon-intensity tracking and communication protocol with Longmont in two years. Longmont-internal signaling strategy in five years, consistent with other EMS deployment plans.

Timeframe
Platte River carbon-intensity tracking and communication protocol should deploy in Longmont in two years, with Longmont-internal signaling strategy in place within five years.

Social and Economic Impacts
Establishing a carbon-intensity tracking system should not have a significant impact on equity for ratepayers. However, city-level signaling will need to roll out with equity in mind to avoid negative ratepayer effects. Examples of ways to mitigate impacts on certain groups include:

- Short-term: Create cost-neutral time of use rates, or exempt customers with energy subsidies from time-of-use
- Long-term: Use the developing EMS capabilities to maximize use of renewables via load-shifting and similar strategies

Financial Summary
Program funding options include:

- Platte River's DERs partnership program
- Department of Energy Grants and programs
- Boulder County grants
- Rate increases
- Sustainability tax funds
- Other city budget allocation

Marketing, training, and incentives
The City will need to design a residential and business customer education program about new rate schedules. But overall, consumers won't need to understand the intricacies of the protocol itself.

Note From Platte River On Signaling Status Now

Councilwoman Martin,

Thank you for your email and questions. I am happy to have this opportunity to share with you what Platte River is currently doing and what our future plans are regarding distributed energy resources (DER).

Platte River does maintain a projected load forecast that refreshes on a per hour basis. This forecast is accessible to utility staff of the four owner communities through a password protected portal. If you are interested is accessing the portal too, just confirm and I will forward a password and the link.

Presently, no additional systems are in place that would provide a signal to our owner communities when resources change to become available or unavailable, nor when peaking units are deployed to backfill a loss of resources in order to maintain reliable delivery of energy. Platte River does strategically deploy a voltage reduction system with Longmont and can reduce load by up to one percent. The system has an automatic notification system to ensure all parties are aware when this occurs.

Platte River has not yet begun discussing specific technologies to deploy for demand side management. We do know that technology, including communication's technology will be needed to help meet our Resource Diversification Policy. Platte River and its four owner communities have formed a DER strategy committee. We know this is vital to our successful integration of noncarbon resources and our future. We have defined DER to include demand side management, distributed generation, energy efficiency, distributed energy storage and beneficial electrification. We believe that creating a strategy as five utilities is key to implementing and advancing these important technologies and programs successfully. We also believe that customer engagement and buy-in is critical to the success of these efforts and will plan to hold multiple engagement sessions with our owner communities to help us create a DER strategy.

As you may know, we have begun an electric vehicle charging study, which has provided us with valuable information. There are customers from Longmont currently participating. We are continuing to study and have plans for a phase 2 deployment to test how we can call on those electric vehicle customers to charge when optimal to the grid.

We are committed to reaching our resource diversification policy goal and believe many of the programs and technologies you mentioned are key to that goal. I am looking forward to working with you and others as we continue to transition towards our exciting energy future.

Thank you,

Andy

RE.5) Distributed Energy Resources Development Plan

Recommendation Summary
For the purpose of this report, municipal Distributed Energy Resources (DERs) include generation, storage, or load management resources cited on Longmont's municipal grid, on the low-voltage side of Longmont's main substation meter. The benefits of DERs are:

- Mitigate the risk of area-wide low renewable production by distributing generation facilities widely. Longmont is the southernmost point of the Platte River Power Authority (Platte River) service area.
- Create dispatchable means of curtailing or increasing Longmont's demand for energy at a given time and shifting demand from one time of day to another. This reduces the "demand charges" that Longmont pays to Platte River and must pass on to its ratepayers.
- Reduce Platte River's requirement to overinvest in renewables in order to maintain the system's reliability.

Longmont should create and implement a Distributed Energy Resources Development Plan. By the end of 2025, the City should run three to five pilot projects and evaluate their ability to yield demand swings that will materially affect Platte River's capital investment in renewable generation and performance on the energy imbalance market.

Objective
Begin investing in enterprises that produce and subsidize three to five powerful DERs that enable Longmont to take command of its energy management. Create a 5-year pilot program and a 10-year development plan that includes:

1. A battery-backed community solar garden with customer subscriptions.
2. At least one all-electric energy-managed Planned Unit Development (PUD) with optional rooftop solar and a utility-scale battery to remove latency from load-shifting responses.
3. Group-buy programs on EVs, air- and ground-source heat pumps, electric water heaters, and communicating thermostats/HEMS. Market penetration of all these supports and ads to the dispatchable range of the city's internal energy marketplace.
4. Battery-boosted level-3 public or commercial EV charging stations. As solar generation becomes predominant, the batteries can discharge to support supply during nighttime power sags.
5. Beneficial electrification pilot in a pre-2000 neighborhood to assess feasibility, cost, and effective storage yield of doing so.

Target

<u>Specific</u>
Demonstrate Longmont's ability to shave peaks in overall demand and absorb surpluses in the Platte River service area by means of distributed generation, distributed storage, and dispatchable loads.

Measureable
Demand for electricity is measurable. Other critical metrics include response time for Longmont to curtail demand or absorb surplus, how DERs will affect the demand rates Longmont pays compared to the other cities in the Platte River service area, and the reliability of the overall network.

Achievable
Technologies for creating practical DERs are in production or pilot stages today in other communities. The Platte River service area is an ideal test-bed because the climate is neither too mild nor too severe, the area is rich in renewable resources, and the existing service base is low in cost and high in reliability. Longmont can leverage its competent and forward-looking economic development partners who will be eager to invest in this goal.

Relevant
If every city could demonstrate the ability to swing its demand by a factor of 10%, Platte River would not have concerns about how to meet the 2030 zero-carbon goal. The ability to shift energy consumption and production according to the needs of the wider network reduces the need for the G&T authority to over-invest in renewable production capacity. The ability to avoid demand charges is a social benefit to the extent that demand surcharges are now spread across all rate classes. Both of these factors keep rates low for the population as a whole as well as the lowest-income ratepayers, satisfying just transition requirements to a large extent.

Time-bound
The first major demonstration milestone must be set at five years (2025). This allows Longmont to set additional goals for 2030 as well as providing input to Platte River's Integrated Resource Plan (IRP) that will take the service area out to 2030. Platte River will be able to rely best on Longmont's projections for 2025-2030 based on our experience with the 2020-2025 interval. This demonstration milestone is more urgent than ever because Platte River's 2020 proposed IRP scenarios all fall short of the four cities' goals for renewable energy. Longmont's plans and achievements must demonstrate that there is no reason to fall short of the *ownership's* established goals.

Timeframe
Five to fifteen years, with demonstration goals and capacity targets at five and ten years.

Social and Economic Impacts
None of the large-scale programs in our report are likely to be funded solely by energy rates or conventional taxation methods. They need to be conceived and built as public-private partnerships, using unconventional financing methods, or by means of various state and federal subsidies. Grants may increase if there is a downturn and stimulus effort in response to COVID-19.

The existence of DERs in Longmont can drive social equity because it will allow us to achieve rate parity with the other three cities of the service area. Today, we pay a penalty for our lack of ability to curtail or shift peak demand. [12]

Additionally, to the extent that the air quality improves as we move away fossil fuel sources of electricity, everyone will benefit. DERs are a "last mile" technology that puts the Platte River service area over the top in achieving this goal by the year 2030.

Potential negative outcomes, depending on how these programs are funded, include increasing the tax burden on low- and middle-income residents. Some necessary steps tend to benefit upper-income residents disproportionately.

As was done in the recent electric rate restructuring that pays for the AMI rollout and other upgrades to the Longmont Power & Communications (LPC) system, hardware and software, creative rate design can mitigate this disproportion by allocating costs in a "progressive" manner, shifting the burden onto those who can best afford it and minimizing the impact on those who can least do so. Below are suggestions as to how each of the identified project types might affect the city.

1. A battery-backed community solar garden
    - Allows residents who can't afford to deploy local solar on their own property, or can't do so for some other reason such as the nature of their dwelling, to participate in solarization.
    - An energy efficiency "rewards program" could help low-income ratepayers' access shares. Incentivized behaviors could include joining prepay or other budgeting programs, achieving reduction in consumption, and participating in beneficial electrification programs.
    - A study of the economics must come first. Benefits will probably depend on low-cost infrastructure and land financing.[13]
2. At least one all-electric energy-managed PUD with optional rooftop solar and a utility-scale battery to remove latency from load-shifting responses
    - There are five to ten opportunities for new residential/mixed use neighborhoods in Longmont. A 60-acre development with all-electric appliances, uniform/compatible EMS, and small scale, onsite solar or wind (small scale) local generation would offer many of

[12] The cost to Longmont's ratepayers of demand charges from Platte River needs to be quantified. While the City cannot capture this per ratepayer today, the City can capture it at the substation meter over the next three months. Summer-month data will be more important, but not available until after this report is delivered. The Climate Action Task Force respectfully ask LPC to make these data available for study as soon as possible.

[13] Minnesota has a mandated community solar garden program, but there are differences in climate and energy supply there to Longmont. Selection of a CSG as part of Longmont's DER program should start with a cost-benefit study or soliciting commercial investors. http://www.startribune.com/complicated-economics-of-community-solar-gardens-subject-of-debate/503575142/?refresh=true Longmont could consider a land grant to alter the cost-benefit equation for a commercial CSG developer.

the same system benefits as a solar community garden. These include helping the city peak shave with respect to the Platte River interface and having a positive impact on rates citywide and across all rate classes.
    - Residents and commercial property owners in such a development benefit disproportionately compared to residents who live outside such an area. However, an all-electric community pilot program will provide information for Longmont to have a better electrification strategy for the city as a whole.
    - Longmont has many control mechanisms to ensure that such mixed-use developments meet other social needs of the city, such as developing a high-density low-to-middle income inventory of housing stock. Providing this accessible housing inventory is a broad social good.
3. Group-buy programs on electric vehicles, air- and ground-source heat pumps, electric water heaters, and communicating thermostats
    - Spreads the up-front costs of expensive technologies across customers based on their ability to pay.
4. Develop battery-boosted level-3 public or commercial EV solar generated charging stations. As solar generation becomes predominant, the batteries can discharge during nighttime power sags.
    - As a public amenity, this caters mostly to the well-to-do in the short term, though it is also a city feature that encourages visitors, conventions, etc. Could the City negotiate with rental agencies to promote the use of EVs to visitors? Providers and organizations like AAA will map charging opportunities for travelers. Thus, implementing this project would likely have a significant effect on Longmont as a driving destination, and boost the general service economy. Boulder now has a major Tesla “filling station,” but Boulder is less accessible as a travel stop as well as more expensive than Longmont.
    - The social benefit to this is in lowering supply-based rates during periods of low renewable production. Here, all ratepayers benefit equally – though mostly in the out-years as renewables take over as the primary source of production and nighttime becomes subject to higher supply-based variable rates.
5. Pilot the beneficial electrification of an older neighborhood to assess feasibility, cost, and effective storage yield of doing so
    - A beneficial electrification program has the greatest potential for social equity of any of the mentioned approaches. Longmont has many older neighborhoods where infrastructure and home appliances will come due for upgrades. The older the neighborhood (and the smaller the homes) the more likely that upgrading will be a burden to property owners and renters in the area.
    - The steps in a citywide beneficial electrification program would be: 1) do project #2 to learn benefits. The green-fields version of this will be easier; 2) do a pilot overlay project on a relatively age- and spatially- uniform neighborhood like Southmoor Park, to gain experience and identify structural concerns that will have to be addressed.

- After 2025, put together a staged beneficial electrification plan for the whole city. This will need to be a 10-15 year comprehensive plan, and include removing or rendering safe any aging natural-gas delivery infrastructure that become obsolete in the process.

6. Other private business models for solarization exist - such as where the private business installs solar generators on household rooftops, paying for them via selling excess electricity that the household does not use back to the municipal utility. This might become a means for funding battery banks in the city, as larger-scale batteries owned by the business are more economical than home batteries such as the Powerwall.

Financial Summary

Here are suggested approaches to financing each of the proposed DER Pilots, with numbering preserved from section 2 above. Note that these are not the only options.

None of the large-scale programs in our report are likely to be funded solely by energy rates or conventional taxation methods. They need to be conceived and built as public-private partnerships, using unconventional financing methods, or by means of various state and federal subsidies. Grants may increase if there is a downturn and stimulus effort in response to COVID-19.

1. **Community Solar Garden**
   Cost-benefit analysis comes first. After that, seek commercial developers, with land donation or special financing to bring margins into a feasible range for both developers and subscribers. Finally, consider additional value-adds for the project, including agricultural operations of applicable crops.
2. **All-electric developments**
   At least one proposal is already before the city, so this could be an early win. This would mainly rely on private financing. For future projects. A public-private partnership with the city, or granting a mixed-use Metropolitan Taxation District could help properties in the district sell at competitive prices. The experience from a development like this will assist the city in a phased roll-out of a full-scale beneficial electrification program beginning in 2025 or perhaps earlier.
3. **Group-buy Programs**
   Boulder County and Platte River are already doing this, and InterGovernmental Agreements (IGAs) are already in place for cooperation of this kind. State subsidies can be expected and lobbied for. Being ahead of the curve will allow us to reap the most consistent benefits.
4. **Battery-Boosted EV Charging Stations**
   With luck and planning this will occur through commercial enterprises with recruitment, incentives, and public-private partnerships with the city and other major nonprofits. For example, the educational, maker-space, and performing arts/convention center included in the Full STEAM Ahead vision are one example.
5. **Managed Beneficial Electrification Phases**
   The city needs to start a study soon to determine when is the optimal time to begin in each neighborhood and subdivision, as well as what kind of mill levy would be needed to support it. A credit or rebate program of some sort could repay individual businesses and residences who

are “ahead of the curve” and have performed all or part of the infrastructure upgrades on their own.

6. **Grant Opportunities**
7. **Collaborate with Solar Companies**

Marketing, training, and incentives

Several of the projects are incentivized commercial projects, and the commercial investors will probably also have experience marketing the concepts.

Longmont must engage in Workforce Development programs with local businesses and higher education institutions. Trades needed for our transition to renewable energy include:

1. **Electricians:** The demand for workers on the municipal grid, transformer-to-meter service upgrades, and in-home upgrades for beneficial electrification will increase over time.
2. **Gas line technicians:** Workers who will have been working on removing or safely abandoning flow lines and gathering lines may be enlisted in using their skills to safely disable the delivery lines in neighborhoods as they are abandoned. At least some amount of new/re-training will be required.
3. **Outreach experts:** Longmont will need to conduct major outreach efforts to sell the public aspects of this plan to voters as well as early adopters, and will need to focus economic development resources on the commercially-deployed aspects of the plan.

Transportation

T.1) Integrated Transit Services

Recommendation Summary
Expanding public transit coverage and frequency in the next five years requires a better integration of fixed-route bus systems and on-demand services. Public transit needs to become more nimble and flexible than the current system to address climate change, congestion, and the overall efficient movement of people. Beyond a complete revamp of the current public transit operations, a way to accomplish more coverage and availability (not necessarily frequency) of transit is to allow the vehicles to be more flexible in their routing and their fueling. A key combination of routing types that may provide more coverage, availability, and reliability (though not necessarily frequency) would be a Checkpoint service system with electric or Renewable Natural Gas (RNG) vehicles.

Objective
Checkpoint service is a hybrid between fixed route (the 300-series of local RTD routes) and subscription or call-ahead services (i.e. Via or RTD's FlexRide). Fixed route bus service, with higher levels of service or frequency, could provide reliable and consistent service to "high demand" locations around the City at specified times. A Checkpoint service provides service flexibility (similar to Uber/Lyft) between specific locations, or checkpoints. This new model would allow for people who need routine—often people with intellectual disabilities, older people without knowledge or desire to use the internet/Smartphones, and people using English as a second language—to use a more frequent, traditional, fixed route service for key travel corridors; or meet a bus at certain checkpoints. Adding additional service that can deviate from these set routes and pick people up closer to their origins (home)/destinations (work/school/shopping/medical) would serve people who need more flexibility. This micromobility model offers more flexibility, and increases total service area in a more responsive and user-friendly format, than just providing fixed routes with an overlay of FlexRide or call-n-ride services.

Target
In the next year, develop a plan with the Regional Transportation District (RTD) or one of its contractors (i.e. Via Mobility) to establish a low-cost, pilot/test program—possibly with a grant opportunity—for a checkpoint bus service line in Longmont. A measure of success would be achieving a cost per rider lower than the current FlexRide service available throughout Longmont. The goal would be to transition the current FlexRide service to a checkpoint service with more reliability and coverage.

Timeframe
Medium (five years)

Social and Economic Impacts
People with intellectual disabilities, older people without knowledge or desire to use the internet/Smartphones, and people using English as a second language are typically the ones impacted

by a call-n-ride bus system. This system combines call-n-ride with elements of fixed-routes, but there will likely be a "learning curve" of how to use this unique service that may hinder some users. A traditional fixed route bus service would continue to serve as the "backbone" of the public transit system.

Financial Summary
There are funds available through Transportation Demand Management grants that may be applicable for this type of starter service. This recommendation will likely cost $1 million/year.

Marketing, training, and incentives
The implementation of this policy is dependent on actions by the Regional Transportation District and the City working together to change transportation policy over the next 5 years. Current practice is to use a system of free, fixed route buses, funded by the City, and a FlexRide or call-n-ride system overlaying the City to provide a safety net of services. The Checkpoint service is being offered as a supplemental service today for school-aged people, but on a limited basis: it ends during the mid- and late-day services. The goal would be to start the new checkpoint service, integrated with a more frequent "backbone" fixed route service, and the other service providers (i.e. Via transit, Lyft, Uber, TransFort, etc.), to create a fully integrated transit service. This new integration would rely heavily on public education to make sure the public fully understands what is available, when/where it goes, and how to access it.

T.2) Electric Car Charging Stations

Recommendation Summary
Incorporate more electric only charging parking spaces in public parking lot locations in high-density areas, such as Downtown Longmont. Currently, there is one charging station in one public lot in Downtown and it is free to charge a vehicle. There are five additional public lots that could receive charging stations.

Objective
Offer prime parking locations for electric vehicles where people can charge their vehicle while visiting Downtown. More visible charging stations raises awareness and encourages people who own vehicles to consider the electric vehicle option. It also helps support the Downtown community by attracting people who are interested in buying local and supporting the environment instead of traveling out of town for their entertainment needs. There would need to be a parking time limit, so we recommend installing Level Two electric vehicle supply equipment (EVSE), where a 50% battery recharge can be completed within two hours.

Target
Install one to two charging stations each year in the Downtown public parking lots. Prioritize highly used parking lots, with a goal of having the five public parking lots furnished within ten years. All of these lots are located within one block of Main St., in visible locations

Timeframe
Install 20 new charging stations within ten years.

Social and Economic Impacts
People that drive electric or hybrid vehicles will benefit from having more options to charge their vehicle away from home.

Barriers may include a decrease in grant funding or alternative energy program resources. If resources are low, the City may need to reach out to other private or public partnerships to help fund the stations.

People who do not drive electric cars may feel a negative impact in having fewer parking spaces available to them.

Financial Summary
Funding is needed to cover the charging stations, installation, and electric charges and maintenance. The City can partner with the Longmont Downtown Development Authority (LDDA) and Longmont Power & Communications (LPC) to install the charging stations. The City can also apply for state and federal grant funding. Initially, the City should offer free charging. After five to ten years, as EV adoption increases, fees could be applied.

Marketing, training, and incentives
Discussion with the LDDA, City of Longmont, and LPC would need to take place first to discuss current charging stations and how more could be added to the Downtown parking lots. A feasibility study could be implemented first to inspect the lots for suitable charging station locations.

T.3) Connected Bikeways

Recommendation Summary
Widespread, highly-interconnected, and safe (fully lit, above grade, limited-to-no traffic interaction) bikeways are needed to promote personal transport options within the city and allow all major neighborhoods to enter and exit the bikeway without crossing major roads/highways. The Climate Action Task Force recommends a system connecting all major nodes (bus, train, grocery, services, parks), with a focus on serving major neighborhood areas and connecting to major community service centers.

Objective
Make Longmont one of the most bike-friendly, medium-sized cities in the United States by creating a bikeway that circles the city and branches into and out of major nodes and neighborhoods. No biker

should have to cross a major road or highway to access any part of the city. The benefits include decreased carbon emissions from personal vehicles, improved health, and improved safety.

The big takeaway learned from speaking with some City of Boulder planners is that underpasses (dark tunnels) dramatically curb adoption of bikeways. Most people do not feel safe going through dark tunnels at any time of day. Thus the Climate Action Task Force recommends designing architecturally unique overpasses for major roads and highways to create an interconnected bikeway. The other deterrent is proximity to traffic. When Folsom St. in Boulder went from two lanes to one to accommodate a bikeway, the proximity to cars, especially at intersections, actually reduced the amount of cyclists using the road during commuter hours. There must be limited-to-no traffic interactions, essentially creating a separate bikeway from normal roads. People should only have to bike short distances on normal roads from their homes to the bikeway. And the entire route must be well lit in the evening hours.

Timeframe
Ten years to complete the majority of the system, 20 years to complete a totally interconnected bikeway.

Target
(not defined)

Social and Economic Impacts
An interconnected bikeway like the one we are proposing increases biker health through exercise and safety. This feeling of safety can encourage people to bike/scooter/walk more. And it provides better links to underserved areas and people who may not be able to afford a car.

Some increases in bike traffic near people's homes, and any potential road closures or reductions, are potential issues that would need to be addressed in the overall bikeway design. A system with raised bikeways will be more expensive than other options, but should see more use over its lifetime than an underpass-based system.

Financial Summary
This will be a long-term, high-cost effort, requiring very strategic planning to determine the most efficient system of projects to meet the goals. The conceptual planning phase will determine costs and budgeting needs. Final designs will determine specific cost needs. Initial estimates are $10-20 million, or a million per year, to achieve a fully separated system for people riding bicycles, and other active modes of transportation.

Marketing, training, and incentives
There will need to be a significant policy commitment to allocate resources to create this kind of separated bicycle/pedestrian connector network. Much of this effort has been completed in the Enhanced Multi-Use Corridor plan (2018), but will need to continue in a targeted planning/design

approach. Additionally, the plan will need to result in a decrease in total Vehicle Miles Traveled (VMT) and greenhouse gas (GHG) pollutant reduction.

T.4) Alternate Work Schedules – Commuter Trip Reduction

Recommendation Summary
Develop a program that educates employers and employees about ways to reduce congestion, which in turn will reduce stress, greenhouse gas emissions, and air pollution.

Objective
This program, which would be voluntary for employers, would provide a menu of options to reduce single occupancy vehicles during commute periods. It would ask employers to designate one person in their organization as a resource officer for other employees and as a point of contact for the program administrator.

Target
Reduce peak period employee trips by 20%, measured through employer surveys.

Timeframe
Begin education campaign within two years, with 20% reduction of local peak-hour VMT within ten years of beginning the education program.

Social and Economic Impacts
Provides employees with abilities to work from home, take public transit, and/or work flexible hours outside of 8 am – 5 pm. This would reduce greenhouse gases, air pollution, and save employees time and stress.

Financial Summary
The City would need one full-time employee to manage a commuter trip reduction program that could be rolled out to businesses, and combined with existing Transportation Demand Management programs (i.e. Commuting Solutions and Smart Commute Metro North).

Marketing, training, and incentives
The program can rely on marketing/outreach materials developed elsewhere, with some modifications. Training could be done via workshops or existing business assistance programs. If funds are available, consider incentives for business to drive program uptake instead of voluntary programs.

Anexo C: Informes Anexos del Comité JTP

Resumen de Plan de Transición Energética Justa

La aprobación de la Resolución de la Emergencia Climática impactó el desarrollo del Plan de Transición Energética Justa (JTP por sus siglas en inglés)[14], que estaba desarrollándose desde fines del 2018. El objetivo inicial del JTP era crear una transición equitativa hacia el uso de electricidad 100% renovable, por medio de acciones equitativas que disminuyeran su impacto en poblaciones marginadas y poco representadas. La Resolución permitió que se ampliara el alcance del JTP y así poder incluir otras iniciativas que beneficien a las comunidades más afectadas.

El JTP tuvo dos fases:

1) **Conocer nuestra situación actual**

Para saber cuánto acceso se tiene a los programas y servicios de electricidad, la Municipalidad revisó informes nacionales y locales para identificar posibles barreras que impidieran el uso de estos servicios y, para conocer la relación entre la energía, la salud de la comunidad y sus necesidades básicas. Luego, para poder comprender mejor las necesidades de las personas que perciben bajos y medianos ingresos, en el 2019 la Municipalidad distribuyó una encuesta a 562 habitantes de Longmont y realizó diez conversaciones comunitarias. Un resumen de ambas se encuentra abajo.

2) **Crear recomendaciones legislativas y para programas**

La creación de recomendaciones empezó en el invierno 2019 con cuatro talleres "El Medioambiente y Nosotros", cuya finalidad era concientizar a las personas sobre la importancia de incluir la equidad en las acciones y políticas medioambientales. Al culminar con los talleres, la Municipalidad aprobó la Resolución de la Emergencia Climática y puso más énfasis en la acción climática equitativa que en las recomendaciones legislativas para la transición. Las recomendaciones finales sobre las acciones climáticas equitativas y de programas fueron creadas por un Comité del Plan de Transición Energética Justa (JTP), como se explica en la continuación de Recomendaciones de Equidad Comité JTP en el Informe de Recomendaciones de Acción Climática.

Resumen de Encuesta de Plan de Transición Energética Justa y Conversaciones Comunitarias

[14] El plan original del JTP fue crear un plan por separado. Mientras el proceso avanzaba, la Municipalidad decidió integrar el JTP en otros documentos municipales, en vez de crear un plan por separado.

PRINCIPALES HALLAZGOS DE

LAS CONVERSACIONES COMUNITARIAS SOBRE EL PLAN DE TRANSICIÓN ENERGÉTICA JUSTA

El Programa de Sustentabilidad de la Municipalidad de Longmont llevó a cabo una encuesta y varias conversaciones comunitarias, a fin de entender mejor las preocupaciones financieras y de salud por las que atraviesan las familias de bajos recursos, y cómo estas se relacionan con los pagos de electricidad.

También se les pidió a las familias, que nos dieran algunas recomendaciones sobre cómo mejorar el acercamiento a la población, ahorrar electricidad y dinero, e ideas en general para el futuro.

Asuntos que Resaltan

DE 8 CONVERSACIONES COMUNITARIAS RESIDENCIALES:

GASTOS MENSUALES:

1. Altos costos de la hipoteca o alquiler, electricidad, alimentación, salud, medicinas
2. Los hogares que solo usan artefactos eléctricos pagan facturas de servicios más caras en el invierno ($300-$400)

PREOCUPACIONES DE SALUD Y FACTURAS DE SERVICIOS:

1. Se desatiende la salud para pagar otras deudas, como la factura de servicios
2. Se adquieren artefactos adicionales para mejorar la calidad del aire dentro del hogar
3. Los gastos, incluyendo las facturas de servicios, afectan la salud mental y provocan estrés

IMPEDIMENTOS PARA USAR PROGRAMAS DE ASISTENCIA:

1. No conocían ningún programa de asistencia energética
2. No ser elegible (ingresos muy altos)
3. Estar muy ocupado o llenar la aplicación toma mucho tiempo

PRINCIPALES FORMAS DE RECIBIR INFORMACIÓN:

1. Escuelas e iglesias
2. Internet
3. Pasando la voz/gestores culturales

PRINCIPALES FORMAS DE AHORRAR ENERGÍA EN CASA:

1. Desconectar artefactos que consumen electricidad
2. Lavar más ropa con agua fría

RECOMENDACIONES PARA POLÍTICAS Y PROGRAMAS:

1. Mejorar el acercamiento a la población
   - Asociarse con líderes comunitarios, escuelas, arrendadores
   - Acercamiento en persona
2. Brindar más asistencia para pagos atrasados

PROSPERANDO HOY Y MAÑANA

Creando Un Longmont Sustentable

¿Preguntas?

CONTACTE AL EQUIPO DE SUSTENTABILIDAD

sustainability@longmontcolorado.gov

303-651-8416

Principal conclusión

DE DOS CONVERSACIONES COMUNITARIAS CON ARRENDADORES DE VIVIENDAS ECONÓMICAS:

Es caro brindar viviendas económicas que ahorren energía.

RECOMENDACIONES:

1. Cuando se trate de acercarse a la población, ir a sus casas y formar un lazo de confianza.
2. Modificar ciertos programas para ser usados en construcciones multifamiliares (CAReS para todo un edificio).

Encuesta del Plan de Transición Energética Justa

¿Tiene otras preocupaciones relacionadas con el dinero y las facturas de servicios?

RESPUESTAS COMUNES:

1. Manutención del hogar (alimentación, carros, hipoteca, alquiler).
2. No tener suficiente dinero para otras deudas después de pagar las facturas de servicios.
3. Pago de necesidades personales y facturas médicas.

ENCUESTA PARA LA TRANSICIÓN ENERGÉTICA JUSTA

RESULTADOS CLAVE

Investigación realizada por Corona Insights para proporcionar un panorama fundacional de cómo los hogares de bajos ingresos acceden a la energía, participan en programas de asistencia, enfrentan barreras al servicio de energía y expresan sus preocupaciones sobre la energía.

54%

de los encuestados mantuvieron su hogar a una temperatura poco cómoda para poder pagar la factura del servicio público

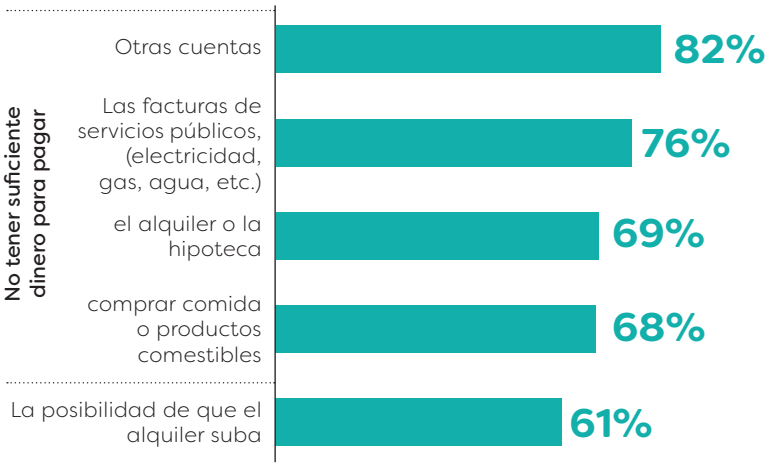
48%

de los encuestados redujeron alimentos o medicamentos para poder pagar la factura del servicio público

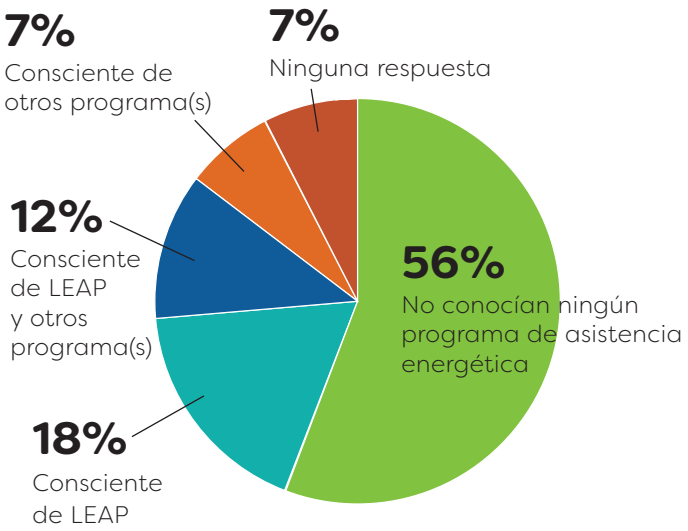
46%

de los encuestados necesitaron ayuda, o más ayuda, para poder pagar las facturas del servicio público

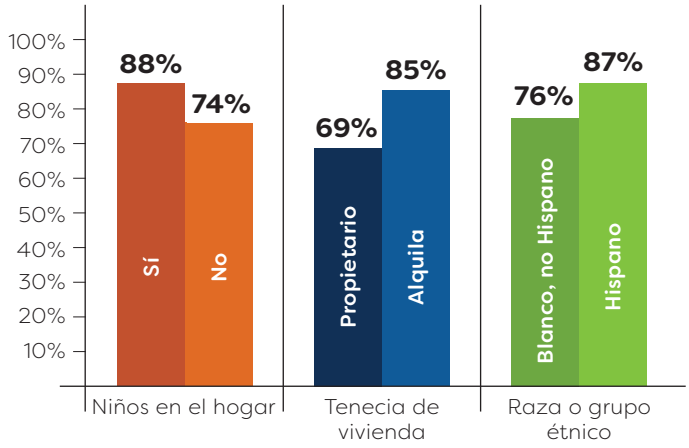
PORCENTAJE DE ENCUESTADOS QUE DIJERON QUE "SE PREOCUPARON MUCHO" POR LO SIGUIENTE EN EL ÚLTIMO AÑO



PORCENTAJE DE ENCUESTADOS QUE CONOCÍAN O UTILIZARON PROGRAMAS DE ASISTENCIA ENERGÉTICA



HOGARES PREOCUPADOS POR PAGAR LAS FACTURAS DE SERVICIOS PÚBLICOS, POR TIPO DE HOGAR



BARRERAS MÁS FRECUENTEMENTE MENCIONADAS PARA SOLICITAR PROGRAMAS DE ASISTENCIA ENERGÉTICA

- No conocía lo suficiente sobre los programas
- No calificaría para asistencia
- No sabía dónde ni cómo presentar la solicitud
- No tenía toda la información necesaria para presentar una solicitud

Proceso de la perspectiva de equidad

1. Sectores beneficiados	**Identificar los principales grupos de la comunidad que se benefician con la acción climática.** Al identificarlos, se podrá diferenciar a los grupos que faltan y que necesitan más apoyo. El enfoque de equidad trata de ayudar a las comunidades según sus necesidades y, considera que, al favorecer a las comunidades de primera línea, se podría reducir la falta de acceso a los programas y disminuir los efectos del cambio climático.
2. Sectores perjudicados	**Identificar los principales grupos de la comunidad que se perjudican con la acción climática.** Al identificarlos, se podrán evitar o mitigar las consecuencias dañinas o no deseadas. La perspectiva de equidad hará posible que se creen formas de evitar o reducir los impactos negativos en ciertas comunidades, poniendo énfasis en los sectores perjudicados. Las características clave a considerarse son el acceso, disponibilidad, precios, distribución y difusión de las acciones climáticas.
3. **Acceso y disponibilidad**	**Identificar diferencias entre la acción climática y la disponibilidad** La acción climática debe estar diseñada para evaluar las barreras que enfrentan las comunidades. Hay que considerar los siguientes aspectos: • ¿Todos los sectores de la comunidad tendrán el mismo acceso a esta acción climática? • ¿Esta acción climática estará disponible para las comunidades perjudicadas? • ¿Cuáles son los impedimentos y retos que enfrentarían las comunidades perjudicadas para poder participar en esta acción climática?

	• ¿Cómo se pueden evitar o disminuir estos impedimentos?
4. Precios	**Identificar cuán accesibles son los precios de las acciones climáticas** La Municipalidad debe tener en cuenta que los ingresos de las familias y su capacidad económica pueden afectar la participación en las acciones climáticas. Hay que considerar los siguientes aspectos: • ¿Todos los grupos de la comunidad pueden pagar el costo del programa? • ¿Los desempleados, indocumentados y otras comunidades perjudicadas podrían pagar el costo del programa? • ¿Se ofrecerá asistencia económica? • ¿Se ofrecerá asistencia económica a las comunidades perjudicadas? • ¿La asistencia económica será una prioridad para las comunidades perjudicadas?
5. Distribución geográfica	**Identificar las diferencias en la distribución geográfica de las acciones climáticas.** Las acciones climáticas deben tener en cuenta la distribución geográfica y centrarse en vecindarios y comunidades que tienen menos acceso a infraestructuras y servicios básicos. Su diseño debe considerar también a las comunidades con alto riesgo a los impactos del cambio climático. Hay que considerar los siguientes aspectos: • ¿Cómo se va a distribuir esta acción climática en todos los vecindarios y comunidades? • ¿Esta acción climática se va a distribuir en las comunidades perjudicadas?

	• ¿Esta acción climática va a variar dependiendo de la zona? ¿Debería variar? • ¿Esta acción climática debería ser una prioridad en ciertas comunidades o vecindarios? • ¿Cómo se puede mejorar la distribución geográfica de esta acción climática?
6. Datos e información	**Identificar y recopilar información referente a la acción climática** Al evaluar la equidad hay que basarse en información fidedigna sobre la acción climática y las comunidades perjudicadas. Los temas que pueden ayudar a identificar impedimentos y oportunidades para la equidad en la acción climática son: datos sociodemográficos, multiculturales, de distribución, cambio climático, vulnerabilidad en términos de salud, tendencias, necesidades, percepciones, conocimiento del clima, emisiones de gases invernadero e impactos del clima.
7. Comunicación	**Crear una estrategia de comunicación que tenga como prioridad a las comunidades perjudicadas** Las acciones climáticas deben estar acompañadas de una estrategia de comunicación clara que tenga como prioridad a las comunidades perjudicadas. Hay que considerar los siguientes aspectos: • Las estrategias de comunicación deben ser innovadoras para alcanzar al público objetivo (redes sociales, personas influyentes). • Incluir estrategias de comunicación multilingüe. • Las traducciones deberían ser simples y utilizar un lenguaje entendible. • Si fuera posible, antes de lanzar las campañas de publicidad, se deberían consultar con la comunidad. • El plan de comunicación debería incluir campañas a medio y largo plazo.

Herramienta Para Aplicar La Perspectiva De Equidad

Revisión de las recomendaciones de acción climática equitativa

Nombre de la recomendación:

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	
2. **¿Quiénes se verían perjudicados con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	
3. **¿Cómo podría mejorarse esta acción climática?** a. Para mejorar los impactos positivos. b. Para reducir los impactos negativos. c. ¿A quién deberían estar dirigidas estas recomendaciones?	
4. **¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática?** (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	
5. **¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?**	
6. **En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?**	
7. **¿Algún comentario adicional, sugerencia o pregunta?**	

Comentarios sobre las recomendaciones de acción climática

Cuarta reunión del Comité JTP, 13 de febrero de 2020

Opiniones del Comité sobre cómo aplicar la equidad en dos programas actuales de la Municipalidad.

Programa actual de la Municipalidad: programa CARE

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Mitigación • Reduciría los costos para personas de bajos ingresos. • ¿Quiénes se beneficiarían con esta iniciativa? Personas de ingresos medios a bajos, principalmente. Quien sea sin importar su estatus previo.
2. **¿Quiénes se verían perjudicados con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Los empleados del sector petrolero y del gas natural, ya que disminuiría el uso energía. • No para todas, porque el programa establece un límite de ingresos, pero ayudaría a la gran mayoría. Además, es posible que se creen puestos de trabajo dentro del programa.
3. **¿Cómo podría mejorarse esta acción climática?** a. Para mejorar los impactos positivos. b. Para reducir los impactos negativos. c. ¿A quién deberían estar dirigidas estas recomendaciones?	a. Ampliando la participación con estrategias de mercadeo, asegurándose que los materiales y mensajes sean traducidos, empleando contratistas que protejan el medio ambiente, y obteniendo más financiamiento. b. Asegurándose que haya oportunidades de trabajo para las personas desempleadas del sector petrolero y del gas natural c. Para empezar, a los sectores más necesitados (ancianos, vecindarios de casas móviles y familias con niños pequeños) y a comunidades de bajos ingresos (Parque Spangler).

4. **¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática?** (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	• Determinar áreas comunes para publicitar la iniciativa, como organizaciones latinas sin fines de lucro y vecindarios de bajos ingresos.
5. **¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?**	• Poner más énfasis en lo gratuito y en el ahorro de dinero, y ya no usar el actual mensaje negativo con palabras demasiado compasivas. • Promocionar el programa de puerta en puerta entregando pequeños obsequios como focos de luz, aireadores, cabezales de duchas, etc. • Los más necesitados. 12,000 hogares en Longmont han sido catalogados de "alta necesidad".
6. **En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?**	• Evaluar las necesidades de los solicitantes y atender primero a los más necesitados; postular para subvenciones; solicitar donaciones de entidades privadas y de la comunidad en general; finalmente, subir los impuestos si fuera necesario.
7. **¿Algún comentario adicional, sugerencia o pregunta?**	• No se discutió.

Programa actual de la Municipalidad: programa del bus gratuito

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Mitigación • Reduciría la inequidad geográfica y económica. • ¿Quiénes se beneficiarían con esta iniciativa? Las personas de bajos recursos, estudiantes y los que no tienen carro.

2. ¿Quiénes se verían perjudicados con esta acción climática y cómo? (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Los que pagan impuestos y no usan el transporte público. Los que creen que viajar en bus afectaría su estatus social. Proyectos que no son financiados para llevar a cabo este programa. • El tiempo de viaje aumentaría. Si se va a tomar un bus, en vez de usar un coche en caso de emergencia, puede que no haya mucha flexibilidad para atender la situación. Seguridad alrededor del tráfico cuando se camina entre estaciones de bus.
3. ¿Cómo podría mejorarse esta acción climática? a. Para mejorar los impactos positivos. b. Para reducir los impactos negativos. c. • ¿A quién deberían estar dirigidas estas recomendaciones?	a. Recolectando información sobre cómo se moviliza la población de Longmont, enfocándose en cubrir más rutas y entendiendo los comportamientos de viaje. Promover el uso del bus. Que los buses pasen con más frecuencia. Usar buses más pequeños, como minibuses para que haya más, pasen con más frecuencia, lleven más pasajeros y se reduzca la contaminación del aire. Uso de buses eléctricos. b. Ofreciendo otros medios de transporte en caso de emergencias, como taxis, si fuera necesario. Mejorando la seguridad del tráfico, en especial, cerca de las estaciones de bus. Entendiendo las necesidades de transporte y los comportamientos de viaje. c. A las personas que ya usan el bus. Mejorar la información en las estaciones del bus. Comunicar los impactos negativos y positivos a los administradores del transporte público.

4. **¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática?** (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	• La encuesta actualizada del transporte en Longmont. Actualizar y mejorar los horarios del bus en las estaciones.
5. **¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?**	• Poner horarios claros y exactos. Comunicar a todos que el servicio es gratuito. Hacer saber a la comunidad, si los empleados de la Municipalidad, especialmente, los concejales, usan el bus con frecuencia. Explicar por qué existe el servicio de bus gratuito. • Campaña publicitaria.
6. **En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?**	• Implementar el programa "adopta un bus". Pedir ayuda a las iglesias, vender productos horneados, donaciones.
7. **¿Algún comentario adicional, sugerencia o pregunta?**	• No se discutió.

Reunión Conjunta Del Grupo De Trabajo De Acción Climática Y El Comité De Transición Energética Justa, Marzo 5, 2020

Opiniones grupales sobre cuatro acciones climáticas propuestas por el Grupo de Trabajo de Acción Climática.

Propuesta de acción climática: electrificación

Resumen de la discusión:

- El CATF proporcionó un resumen de la electrificación y la necesidad de desarrollar un Comité de Viabilidad para analizar las consideraciones de salud pública, seguridad, diseño de tarifas y reducción de gases de efecto invernadero para desarrollar un plan más completo para noviembre de 2020.
- Discusión sobre la perspectiva de equidad – Puntos principales:
    - Comenzar con la eficiencia energética primero antes de la electrificación:
        - Ayudar a preparar a los hogares, especialmente a los de bajos ingresos, para que no tengan facturas significativamente más altas.
        - Ayuda a preparar la red eléctrica para manejar la nueva demanda.
    - Centrar la electrificación en la equidad:
        - Combinar con el programa CARE - mejoras de eficiencia energética calificadas por ingresos (este programa tendrá que ser ampliado).
        - Analizar otros programas de asistencia.
    - Necesidad de tomarse el tiempo para desarrollar un programa sólido para la electrificación con el fin de comprender y abordar plenamente las cuestiones de equidad.

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Combinar con el programa CARE para obtener mejoras en la eficiencia energética y la climatización de forma gratuita para los hogares con ingresos calificados; centrarse en conseguir que la gente se sienta cómoda en sus casas primero; si esta parte no se hace y se electrifica, las facturas serán demasiado altas. • El programa es limitado, por lo que es necesario ampliarlo. o CARE cuesta actualmente alrededor de 4000 dólares por casa o 2000 dólares por casa móvil; se necesitarían aproximadamente 50 millones de dólares para cubrir 12.000 casas

2. ¿Quiénes se verían perjudicados con esta acción climática y cómo? (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Hay altos costos iniciales que son una gran barrera para los hogares de bajos ingresos. • La mayoría de las personas que tienen salarios más bajos no podrían acceder a esta acción. • Si se exige a los propietarios que mejoren el servicio eléctrico, ¿cuánto más tendrán que pagar los inquilinos?
3. ¿Cómo podría mejorarse esta acción climática? a. Para mejorar los impactos positivos. b. Para reducir los impactos negativos. c. ¿A quién deberían estar dirigidas estas recomendaciones?	• Empezar con la eficiencia energética primero y preparar tantos hogares como sea posible para la transición a toda la electricidad. • b. Necesita una secuenciación para centrarse en la eficiencia primero, preparar el sistema eléctrico para manejar la nueva demanda, antes de la electrificación • Diseñar futuros programas de mejora de la vivienda similares a CARE (programa gratuito y calificado según los ingresos); asociarse con CARE para conectar a las personas que necesitan nuevos aparatos con los aparatos eléctricos. • Crear un lugar para que los residentes con más ingresos donen sus electrodomésticos para que los residentes de menores ingresos los compren más baratos/sin costo alguno; si necesitan reparaciones, conectarse con estudiantes de secundaria u otros estudiantes a través de programas vocacionales para arreglar los electrodomésticos para que puedan seguir trabajando. • Buscar programas de asistencia para mitigar el aumento de las tarifas. • Potencialmente aumentar los fondos para el programa Longmont CAReS para proporcionar asistencia con las facturas de servicios públicos a aquellos que podrían verse afectados por el aumento de las tarifas.

4. ¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática? (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	• ¿Existe actualmente mano de obra disponible para manejar la expansión de los programas actuales de eficiencia energética de la Ciudad de Longmont para acomodar 12,000 hogares y/o otros programas?
5. ¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?	• No hay discusión.
6. En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?	• Enfocarse primero en la eficiencia energética.
7. ¿Algún comentario adicional, sugerencia o pregunta?	• Necesidad de un enfoque continuo en la equidad, y realmente mantener eso en el centro. • Necesidad de tomarse el tiempo para desarrollar un programa sólido.

Propuesta de acción climática: puntos de control y servicios de bus flexibles

Resumen de la discusión:

- La CATF proporcionó un resumen del actual sistema de buses gratuitos RTD y recomendó crear un sistema de buses locales gratuitos RTD que utilicen puntos de control fijos, pero que no tengan una ruta establecida.
- Discusión sobre la perspectiva de equidad – Principales puntos:
    - Anunciar el programa ampliamente, de puerta a puerta, con socios y agentes culturales para navegar el sistema, comunicación accesible para los niños, etc.
    - Mejorar la comunicación y el acceso:

- Operadores bilingües, mensajes en español apropiados desde un punto de vista cultural y otros idiomas que no sean el inglés.
- Desarrollar un sistema para aquellos que no pueden acceder a una aplicación.
- Ampliar las horas de servicio.
- Dar prioridad a este proyecto:
- Financiar el proyecto.
- Crear carriles preferenciales para los autobuses.
- Buses eléctricos o de gas natural renovable.

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Los residentes de bajos ingresos. • Aquellos que no tienen coche o licencia. • Adultos mayores: Este servicio proporciona la seguridad de saber que los recogen y los van a dejar. • Personas con discapacidades. • Familias. • Todo el mundo puede beneficiarse, el servicio de control también será gratuito. o Un sistema parecido a Uber puede costar 3 dólares cada uno, sería

2. **¿Quiénes se verían perjudicados con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Aquellos que trabajan más tarde de lo que el autobús está funcionando.
	• Los que están preocupados por llegar a tiempo.
	• Concesionarios de coches, mecánicos de coches y sus empleados, conductores de Uber y Lyft, taxis.
	• Contribuyentes que están pagando por el programa.
	• Aquellos que no conocen el servicio
	• Aquellos que no pueden acceder a una aplicación (no tienen un teléfono, o tienen un teléfono que no tiene acceso a Internet o a aplicaciones)
	  o El puesto de control podría ayudar con eso, pero pierde la flexibilidad.
	  o Puedes llamar al conductor directamente, siempre y cuando

	puedan llegar al punto de control a tiempo.
3. ¿Cómo podría mejorarse esta acción climática? a. Para mejorar los impactos positivos. b. Para reducir los impactos negativos. c. ¿A quién deberían estar dirigidas estas recomendaciones?	• Publicidad o Lienzo de puerta a puerta en comunidades específicas. o Radio y televisión. o Asociarse con empresas para dar información a sus empleados. o Asociarse con lugares como el Centro de Ancianos que proporcionan la información a todos los adultos mayores. o La Fundación de la Comunidad recaudó 100.000 dólares para dar a las organizaciones sin fines de lucro para contratar a los agentes culturales para hacer la divulgación, la educación y o ayudar a navegar por el sistema para el Censo. o Incorporar socios como empleadores, distrito escolar, etc. o Crear una campaña por unos meses, durante la campaña hacer que los agentes culturales ayuden a otros a navegar por el sistema. o Grandes anuncios, "Salva el mundo, sube al autobús". Mensajes impulsados por la culpa. o Crear un evento especial de lanzamiento, y vincularlo con una celebración que ya se esté llevando a

	cabo en la comunidad (por ejemplo, el Día de la Tierra, el Cinco de Mayo). o Tener un evento anual para recordar a la gente el servicio. o Centrarse en la educación sobre la ruta. • Autobuses eléctricos o de gas natural renovable. • Ampliar las horas de servicio. • Más paradas de autobús con refugio. o Hacer seguro que las personas dejen sus bicicletas y carritos de compras. ▪ La ciudad está trabajando actualmente para ampliar los portabicicletas. • Crear diferentes escenarios y pensar en las necesidades de los ciclistas: o Ir al médico. o Ir al supermercado. o Recoger a los niños de la escuela. • Crear incentivos, clases y más para ayudar a los que están siendo expulsados de sus trabajos a hacer la transición a trabajos de conductor de autobús. o RTD no tiene suficientes conductores, pero una ruta local con autobuses más pequeños podría ser diferente. Los jubilados podrían no tener tanto miedo de conducir un autobús más pequeño. • Los conductores o el operador deben ser bilingües, un operador puede ayudar a la gente a saber cómo navegar el sistema de autobuses. • Carriles preferidos para los autobuses o carriles administrados (autobús, coche compartido, o comprar su camino) o Los carriles de tránsito de acceso a los negocios (los autobuses van derecho, pero los coches tienen que

	girar a la derecha), podrían crear un carril designado en Hover. o ¿Por qué comprar en la carretera? Lo hace más caro y difícil. o La gente no debería poder comprar un carril para el autobús. o Desarrollar un servicio para aquellos en el Condado de Weld (RTD no puede servirles). • Crear un código de color de cuando el sistema de autobuses estará lleno de gente. • ¿Quién debe ser el objetivo? o El Ayuntamiento, para que puedan apoyar el esfuerzo con recursos y crear un plan de transición que incluya a todos. ▪ Los miembros de la comunidad necesitan abogar ante los líderes para que este programa de viaje gratuito siga siendo posible. o Las escuelas. o Miembro de la Junta Directiva de Longmont RTD. o Comunidades vecinas, las que no viven en Longmont, pero trabajan en Longmont. o Medios de comunicación social enfocados a un grupo de edad más joven que podría estar mudándose a los nuevos edificios multifamiliares. o Crear centros de distribución para un paquete de bienvenida de la ciudad de Longmont (por ejemplo, iglesias, escuelas, centros comunitarios).

4. ¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática? (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	• ¿Cuántos conductores son bilingües y cuáles son los diferentes idiomas que son comunes en la comunidad?
	• ¿A dónde viaja la gente?
	• ¿Cuándo está lleno el autobús?
	• Información y horarios claros de las paradas de autobús
	• ¿Dónde suele ir la gente a trabajar? ¿Adónde conduce la gente? La ciudad ya tiene acceso a estos datos.
	• Encuesta de movilidad para la ciudad, ¿puede una encuesta o la recopilación de datos ser un componente de la recomendación de la CATF.
	  o ¿Cómo se utilizará el servicio?
	  o ¿A qué horas quiere la gente viajar en el autobús?

5. ¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?	• Los mensajes clave en español no deben ser traducidos directamente del inglés. En su lugar, se debe desarrollar un mensaje diferente y culturalmente relevante. Las traducciones literales no tienen sentido. • Crear paquetes de comunicación que sean accesibles para los niños. Esto puede ayudar a conseguir la aceptación de la familia y ayudar a empoderar a los jóvenes y a crear liderazgo. • Dirigir el alcance a aquellos que no tienen acceso a un vehículo. • Hay que destacar la conveniencia de la ruta. • Hacer que la ruta se sienta segura, si no se siente segura no importa si es segura. • Eliminar el estigma de viajar en autobús, hacer que viajar en coche no sea " cool".
6. En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?	• Recuperar el dinero de la Vía Rápida. • La Ciudad de México implementó una política que asigna los días en que se

	pueden usar los autos de diferentes individuos. • Financiación a través de un programa de subvenciones estatales. • Este programa debe ser priorizado y financiado. • App podría manejar las donaciones, el programa "paga como puedas". • Planes de recaudación de fondos, "Queremos recaudar $X para tener un vehículo eléctrico". • Crear un programa de fondos de contrapartida con un donante importante. • Los grandes empleadores pueden incentivar el transporte público.
7. **¿Algún comentario adicional, sugerencia o pregunta?**	• No hubo discusión.

Propuesta de acción climática: desarrollo de la fuerza de trabajo

Resumen de la discusión

- El CATF proporcionó una visión general de la idea del desarrollo de la fuerza de trabajo y su papel en la transición a una economía de energía renovable. El CATF aún no ha redactado una recomendación completa sobre el desarrollo de la fuerza de trabajo.
- El desarrollo de la fuerza de trabajo es una necesidad crítica, tanto en la transición, como en la evaluación de las desigualdades actuales y las que puedan surgir debido a la transición. Aunque hay muchas oportunidades, el Comité JTP debatió numerosas consideraciones que deben abordarse para garantizar que el desarrollo de la fuerza de trabajo se haga de manera equitativa y resulte en el aumento de la equidad en nuestra comunidad, en lugar de perpetuar inadvertidamente las desigualdades. Las pasantías, los certificados, etc. no siempre son accesibles para todos en la actualidad y necesitamos entender cómo incorporar la equidad en los programas de desarrollo de la fuerza de trabajo.
    - Debe abordar las oportunidades para los residentes indocumentados, que tienen un fuerte interés en convertirse en trabajadores autónomos, pero que pueden necesitar servicios de apoyo adicionales como ayudarles a pagar sus

impuestos, comprender el registro de negocios, el impuesto sobre las ventas, etc.
  - Las solicitudes deben ser simples y accesibles, y debe haber navegadores de recursos para ayudar a las personas a avanzar en el proceso.
  - Asegurarse de que haya oportunidades más allá del nivel de entrada/salario mínimo/trabajo físico mediante la incorporación de capacitación y desarrollo profesional para que las
  - personas puedan avanzar a través de nuevas oportunidades de empleo.
  - Necesidad de comprender la línea de base de quiénes en la comunidad están viviendo en los niveles de pobreza y centrarse primero en reclutarlos y apoyarlos a través de estas oportunidades.

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Los residentes indocumentados:
	  - La gente realmente quiere aprender cosas nuevas, ayudar a la gente a auto-emplearse y proporcionar servicios de apoyo como ayudarles a pagar sus impuestos, etc.
	  - Tal vez haya una oportunidad de utilizar la visa H2B para los trabajadores agrícolas, pero proporcionar los permisos de trabajo para este trabajo - tendría que ser el cambio federal - la visa de acción climática, dar preferencia a las personas que ya viven aquí; debería ser capaz de hacer ese caso debido a la rápida transición que se avecina lejos del carbón.

2. **¿Quiénes se verían perjudicados con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Las pasantías, los certificados, etc. no siempre son accesibles para todos; es necesario entender cómo incorporar la

	equidad en los programas de desarrollo de la fuerza laboral. o Necesitan navegantes que les ayuden a acceder a estos programas. o Necesidad de tener puestos de trabajo remunerados alineados para las personas. o Si la gente no tiene asistencia médica, cuidado de niños, etc. es difícil participar y completar las certificaciones. o Personas con discapacidades. • El programa por sí solo no es suficiente para abordar la desigualdad de ingresos y proporcionar oportunidades a los que más podrían beneficiarse de las nuevas oportunidades de la fuerza de trabajo.
3. ¿Cómo podría mejorarse esta acción climática? • Para mejorar los impactos positivos. • Para reducir los impactos negativos. • ¿A quién deberían estar dirigidas estas recomendaciones?	• Hacer que las aplicaciones sean simples y accesibles, no todo el mundo tiene el nivel de educación para entender una aplicación altamente técnica. • Ofrecer oportunidades de capacitación y desarrollo profesional para que puedan desarrollar habilidades, más allá del trabajo físico, y obtener nuevas oportunidades de empleo. • Cooperativa de propiedad de los trabajadores para aliviar la desigualdad de los ingresos. • Trabajar con la PRPA para ayudar a los trabajadores en la transición si es necesario - ¿podrían esas personas pasar al papel de instalación del AMI? Ayudar a las personas a pasar a • un papel más tecnológico. • La ciudad para establecer un programa de pasantías y luego hacer un seguimiento de las oportunidades de trabajo con los socios

	comerciales - ayudar con los programas de desarrollo profesional. o El desarrollo de la fuerza laboral del condado de Boulder hace esencialmente eso - pero podría haber oportunidades de mejora. • Tiene que haber un camino de entrenamiento y desarrollo de 10 años para que la gente pueda continuar creciendo y teniendo éxito. • Necesita un camino a largo plazo para el crecimiento y el desarrollo.
4. **¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática?** (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	• ¿Quién y qué empleos podrían verse afectados negativamente por la acción climática? Y hacer un seguimiento de cómo pueden hacer la transición • Tasa de desempleo. • Tasa de participación en el programa de desarrollo de la fuerza de trabajo. • Tasa de colocación en puestos de trabajo después de la participación en el programa de desarrollo de la fuerza laboral. • ¿Qué tan bien estamos reclutando y luego sosteniendo/creciendo la capacidad de los participantes en el programa de desarrollo de la fuerza laboral? • Empiece con una línea de base de quién está subempleado ahora y luego mire la conexión con esas personas a estas oportunidades de entrenamiento y rastree si son capaces de sostenerse a sí mismos. • Trabaje con el SVVSD para comprender lo bien que estamos preparando a la gente para este tipo de fuerza laboral. • Examinar las estadísticas de las minorías que viven en el nivel de pobreza, tratar de emplearlas y tener a alguien que se ocupe de reclutar a esas personas.

5. **¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?**	• No hay discusión.
6. **En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?**	• No hay discusión.
7. **¿Algún comentario adicional, sugerencia o pregunta?**	• No hay discusión.

Propuesta de acción climática: estacionamiento pagado en el centro de la ciudad

Resumen de la discusión:

- El CATF proporcionó un resumen de cuatro diferentes opciones para incentivar modos de transporte alternativos: 1) Eco-pases, 2) Programa de retiro de dinero por estacionamiento, 3) Estacionamiento preferencial para vehículos eléctricos, y 4) Estacionamiento pagado en el centro de la ciudad. Esta discusión de la perspectiva de equidad se centró en 4) Estacionamiento pagado en el centro de la ciudad.
- Discusión de la perspectiva de equidad, Estacionamiento pagado – Principales puntos:
    - Beneficia a los ricos a los que no les importa pagar y afecta a las personas con discapacidades, a los adultos mayores y a los que no pueden pagar.
    - Los transportes de la circulación al centro de la ciudad pueden incentivar a las personas para que no conduzcan al centro de la ciudad.
    - Analizar el impacto de esta recomendación en los propietarios de negocios. ¿qué tan dispuestos están los clientes a visitar los negocios del centro? ¿pasarán los clientes más tiempo en el centro de la ciudad?

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Aquellos que son ricos y no se preocupan por pagar el estacionamiento y quieren

	mejores lugares de una disminución de la competencia. • Los que pueden permitirse un coche eléctrico.
2. ¿Quiénes se verían perjudicados con esta acción climática y cómo? (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	• Los negocios del centro de la ciudad. • Aquellos que no pueden pagar para aparcar. • Personas con discapacidades o adultos mayores (si no pueden aparcar fuera de un edificio de forma gratuita). • Vecindarios cercanos.
3. ¿Cómo podría mejorarse esta acción climática? a. Para mejorar los impactos positivos. b. Para reducir los impactos negativos. c. ¿A quién deberían estar dirigidas estas recomendaciones?	• Crear un menú de opciones de transporte alternativo que las empresas deben elegir para sus empleados, pero si una empresa no quiere hacer nada, tiene que pagar en un fondo. Dirigirse a empleadores más grandes. • La primera hora es gratis. o Gratis para personas con discapacidades y adultos mayores. Si eres indocumentado, ¿cómo podrías acceder a algo así? o ¿Cómo impactarían estos programas en las escuelas? Hay una escuela privada y algunas guarderías en el centro. o ¿A dónde van los ingresos que se generan por el estacionamiento? ¿Pueden ir a los negocios o a desarrollar medios de transporte más alternativos? o Programa de permisos en los vecindarios cercanos. o Estacionamientos en las afueras de la ciudad con traslados al centro. Las

	Ferias del Condado de Boulder podrían ser una opción. o Transbordadores de circulación. Eléctricos. • Expandir el sistema de bicicletas al centro de la ciudad.
4. ¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática? (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	• Impacto del propietario del negocio, ¿qué tan dispuestos están los clientes a visitar los negocios? ¿Pasarán los clientes más tiempo en el centro de la ciudad? • Encuestas en el centro de la ciudad. • Estudios de aparcamiento. • Investigación de otras comunidades.
5. ¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?	• Combinar los mensajes con los mensajes para instalar estacionamiento de bicicletas gratuitas y más rutas de autobús. • Añadir información en las paradas de autobús.
6. En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?	• Los negocios dan un cupón para aquellos que no conducen un vehículo con una sola ocupación.
7. ¿Algún comentario adicional, sugerencia o pregunta?	• Dos personas expresaron que no creen que pagar por el estacionamiento sea una buena intervención.

Sexta reunión del Comité JTP, 11 de marzo, 2020

Después de la reunión conjunta del 5 de marzo, el Comité JTP discutió dos temas, ampliamente. No utilizaron la perspectiva de equidad para esta discusión.

Discusión más amplia: comunicación y difusión

- Usar las redes sociales y a personas influyentes.
- Comerciales entre las 3 y las 6 de la tarde.
- Anuncios en zonas de alto tráfico.
- Eliminar el estigma de usar el transporte público, ponerlo “de moda”.
- Pagar para promover la publicidad en redes sociales, por grupos de edad, área...

- Pedir a la red de empresas, que ya está interesada en la sostenibilidad, que ayude a promover estas iniciativas.
- Alianzas con empresas locales que tengan buena reputación.
- Anuncios en los autobuses y en eventos de alto tráfico, como el mercado de agricultores.
- Voluntarios que vayan de casa en casa, estratégicamente a las comunidades que pueden beneficiarse con las recomendaciones. Algunos consideran esta estrategia como intrusiva. También podrían anunciarse reuniones en el parque y que la gente venga por su propia cuenta. Informar sobre estos eventos a través de sitios web, como *Next Door* que sólo anuncia eventos para ciertos vecindarios. Hay una Asociación de Líderes de Grupos Vecinales, con los que podríamos hablar y luego se llevan esa información.
- En abril habrá una reunión de "Navegantes" que pueden ser informados para llevar la información a su comunidad.
- Llegar a grupos como *Walk to Connect* y *Bicycle Longmont.*
- Distribuir volantes a los niños en la escuela para que puedan llevárselos a sus padres o participar en una Asamblea o asociarse con los maestros para hacer actividades con los niños (reales, divertidas, atractivas).
- Llegar a los medios de comunicación: Los medios públicos de Longmont y The Observer.
- Padres involucrados en la educación: buena oportunidad para llegar a la comunidad hispana.
- Las redes sociales son una de las mejores formas de llegar a la comunidad (anuncios dirigidos y anuncios de Google). Campañas para temas específicos, por ejemplo: el autobús gratuito.
- Carteles en áreas comunes como el Centro Cívico, supermercados, hospitales, iglesias...
- Anuncios de televisión con asociaciones. Canales como Univisión y Telemundo.

Discusión más amplia: Incentivos para reducir los viajes individuales en coche

Ideas:

- Aumentar los precios de la gasolina.
- Reglamentos en términos de matrículas, la gente sólo puede viajar en ciertas fechas, la gente programa su vida en torno a las fechas en que se puede conducir
- Si tienes 7 árboles puedes tener un coche
    - ¿Qué pasa si no tienes tierra? Puedes caminar. ¿Y si no puedes caminar?
    - Las personas con discapacidades, los adultos mayores: necesitan considerar a las personas que tienen necesidades diferentes cuando se crean los reglamentos.

- Pagar por el estacionamiento puede ser un incentivo para no conducir
- El dinero y la conveniencia son el factor determinante, ¿cómo hacemos que las alternativas sean más atractivas?
- ¿Puede haber algún tipo de reciclaje del monóxido de carbono de los coches?
- ¿Podrías ofrecerte como voluntario para pagar los árboles o el transporte público en tu factura de servicios?
    - Tenemos programas en la factura de servicios públicos, de baja participación
    - ¿Puede ser cuando lo haces cuando registras tu coche? Esto es a nivel estatal. El condado procesa, pero no controla.
- Los impuestos de dióxido de carbono sobre las emisiones de su vehículo animan a la gente a no estar más ociosos
    - ¿Impactará esto a los trabajadores de la construcción y a los paisajistas que necesitan camiones?
- ¿Puede haber un refuerzo más positivo? ¿Pagar por usar menos?
- ¿Puede haber un mecanismo de puntos que se pueda añadir al sistema de RTD? Contar los embarques, programa de usuario frecuente que recompensa a la gente por viajar en el autobús más con incentivos.
- Crear un programa de embajadores, si se refiere a una cierta cantidad de personas para el autobús o el coche compartido, puede ser un incentivo.

Asociaciones:

- Asociarse con el distrito escolar
    - Esto debería incluir las escuelas subvencionadas.
    - La ciudad tiene abiertas las inscripciones para las escuelas, así que los estudiantes pueden ir a cualquier escuela, pero no siempre hay autobuses.
    - El condado de Boulder tiene un programa para que los niños se incentiven, sería interesante conocer los éxitos y los retos.
- Asociarse con los principales empleadores

Educación:

- Es importante educar sobre por qué es importante la acción climática.
- Desafío:
    - Campaña "Mira como disminuyen las millas de tu coche"
    - Rastree sus viajes a pie, en coche compartido, etc.
    - ¿Puede la gente usar sus teléfonos para rastrear su impacto y beneficio?
    - ¿Puede haber un desafío de transporte, tema "miércoles de caminata", que pueda ser publicitado?
- A corto y largo plazo, se trata de cambiar el comportamiento
    - ¿Quién va a la educación?
    - Incentivos eliminados gradualmente.
        - Los niños obtienen crédito extra por caminar

    - Necesidad de un plan porque la gente podría hacerlo por un tiempo y luego parar
    - Necesita ser diverso y equitativo

Preocupaciones:

- Colorado, hay lluvia, relámpagos, el clima puede hacer que no siempre sea fácil caminar o andar en bicicleta.
- Compartir coche - Mucha logística
- Hay muchas organizaciones diferentes: Way to Go, Communizing Solutions, RTD, Carpooling on the Diagonal -> esto es confuso en lugar de un recurso
    - ¿Puede haber una información centralizada (tendría que ser regional)
    - ¿Son accesibles? Lenguaje, Discapacidad
    - Necesita una persona viva para ayudar a navegar por el sistema
        - Los usuarios habituales de los autobuses que son embajadores, que viajan en el autobús
        - Si recomendaste a alguien, que recibió una pequeña tarjeta de regalo o algún otro incentivo
        - ¿Se puede aplicar esto a otras formas de transporte? ¿Compartir el coche?
- Cuando se toman decisiones hay que tener en cuenta la financiación para la divulgación y la aplicación. ¿Quién va a hacer cumplir las restricciones?
- La infraestructura para bicicletas necesita más trabajo, seguridad y llegar a donde la gente necesita ir. Mejorar la comodidad y la seguridad del transporte en bicicleta.
    - ¿Pueden los callejones convertirse en senderos para caminar y andar en bicicleta? Añada buena iluminación, mejor pavimento.

¿Qué es lo que más entusiasma a la gente? (Preguntado al final de la discusión)

- Programa de escuelas y grandes empleadores
- Desafíos y Campaña para todo
    - Centrarse en cómo unir a la comunidad
    - Necesidad de invertir en recursos.
    - Campaña general para todos
    - Cómo: Grandes volantes que la gente va a ver, televisión, estaciones de radio, en tiendas de comestibles, colores brillantes (algo que se destaca), en las paradas de autobús
    - Utilizar el censo para ayudar a identificar las diferentes áreas en las que hay que centrarse
- Los humanos pasan por diferentes fases en su vida -> desarrollan diferentes programas basados en las diferentes necesidades de los diferentes individuos y donde están en su vida
    - Niño: motivar para hacer cambios.

    - Adulto: Decisión basada en las necesidades.
- ¿Cómo identificas los co-beneficios para que todos se entusiasmen e involucren?
- ¿Cómo se puede crear una campaña que aborde dónde están las personas en su vida, las diferentes fases, aborde las diferentes necesidades, pero aun así tenga un objetivo unificador
    - El objetivo unificador de crear una comunidad más fuerte
    - Aquí están las diferentes cosas que puedes hacer para ayudar (y desarrollar diferentes objetivos en torno a lo que emociona a la gente y conectar con su forma de ser.

Actividad opcional para el Comité JTP

Hubo una interrupción en las reuniones debido a las órdenes de evitar el contacto social a causa del coronavirus. Se entregó una actividad opcional al Comité JTP, la de aplicar la perspectiva de la equidad a una de las recomendaciones del CATF. Solo respondió un miembro, y sus respuestas están a continuación.

Recomendación: Suscripción en programa de ahorro de energía

1. **¿Quiénes se beneficiarían con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	Cualquier hogar que pueda participar, vería un beneficio económico con este programa.
1. **¿Quiénes se verían perjudicados con esta acción climática y cómo?** (por ejemplo, grupos de edad específica, estado migratorio, ingresos)	Algunos hogares no podrían participar, dependiendo de cuándo la demanda es más alta. Por ejemplo, personas que usan ciertos tipos de aparatos médicos que funcionan con electricidad.
2. **¿Cómo podría mejorarse esta acción climática?** a. Para mejorar los impactos positivos. b. Para reducir los impactos negativos. c. ¿A quién deberían estar dirigidas estas recomendaciones?	Positivo: podría darse un incentivo proporcional para cada cliente, según su uso promedio de electricidad. Ofrecer más beneficios a aquellos que usan más energía, para incentivarlos a usar menos, en vez de poner la carga en todos por igual. Negativo: brindar una visión clara del impacto que esto tendría en los horarios de las personas y en sus vidas diarias.

	Público objetivo: hogares con alto uso de energía
4. **¿Qué información / datos podrían ayudar en la evaluación de la equidad de esta acción climática?** (por ejemplo, datos sobre la población, emisiones, impactos, programas de la ciudad, mapas)	Datos de consumo de electricidad y un estimado de los ingresos de los hogares.
5. **¿Cuáles cree que son los mensajes clave que la ciudad de Longmont debe comunicar sobre esta acción climática?**	Hay que enfatizar que el dinero se devuelve, como una nota secundaria, mencionar el hecho de que este es un esfuerzo de toda la ciudad. Todos se han unido para reducir el uso de electricidad, incluso lo que más consumen.
6. **En el caso de fondos limitados por parte de la ciudad, ¿cómo sugiere que se implemente esta acción climática?**	Ofrecer un crédito a los que se inscriben, para que puedan usarlo en el futuro para pagar la electricidad, o reducir temporalmente el dinero que se devuelve a los hogares y darles la opción de retirarse del programa por un tiempo (ojalá que en esta situación, la mayoría de personas no se haya visto muy afectada por esta acción y puedan permanecer en el programa).
7. **¿Algún comentario adicional, sugerencia o pregunta?**	No por ahora.

Appendix D: Community Engagement Reports

Climate Action Questionnaire Report

Overview

Questionnaire Goals

As part of broader community outreach and engagement effort, the Climate Action Questionnaire sought to A) raise awareness and inform the general community about climate action at the City of Longmont, B) gain community input on preferences and unintended consequences for possible climate actions beyond the members of the Longmont Climate Action Task Force and the Just Transition Plan Committee, and C) to inform the development of final Climate Action Task Force recommendations that will be presented to the Longmont City Council.

Methodology

Two questionnaires were developed: one aimed toward residents and one aimed toward businesses. Both questionnaires were offered in English and Spanish. The questionnaire was open for 18 days and distributed through various channels including the Longmont Sustainability Coalition, Senior Citizens Advisory Board, Sustainability Advisory Board, Engage Longmont, the OUR Center, the Longmont Multicultural Action Committee, Longmont Chamber, Latino Chamber of Boulder County, Landlord's Alliance, Neighborhood Group Leaders Association, among other local partners.

The resident questionnaire included 19 questions (nine closed-ended questions and ten open-ended questions). The questionnaire was divided into two main sections; the first section focused on feedback related to four main areas of climate action recommendations (building energy use, transportation, renewable energy, and workforce development). Each of these climate action recommendation areas includes one question ranking, from highest priority to lowest priority of a set of predetermined recommendations, based on preliminary discussions held by the Climate Action Task Force, followed by two open-ended questions, to obtain a description of the positive and negative impacts of such recommendations. This format of three questions (ranking, positive, and negative impacts) was replicated to each climate action area (total of four). After this, two questions focused on multiple-choice related to the primary concerns of the climate action recommendations ranked in the four areas and an open-ended question to explain their answer. Finally, the last question of the first section was an open-ended question asking what other actions/programs on climate action the resident wanted to see implemented by the City of Longmont. The second section included three demographic questions (ethnicity/race, income, and age) followed by an open-ended question to provide their email address for receiving updates on the Climate Action Task Force and sustainability activities from the City.

The business questionnaire included 15 questions (five closed-ended questions and ten open-ended questions). The business questionnaire only included one section. Similarly, to the resident questionnaire, the first 12 questions where focused on feedback related to four areas of climate action recommendations (building energy use, transportation, renewable energy, and workforce development). Each of these climate action recommendation areas includes one question ranking, from highest priority to lowest priority of a set of predetermined recommendations, based on preliminary discussions held by the Climate Action Task Force, followed by two open-ended questions, to obtain a description of the positive and negative impacts of such recommendations. The following two questions focused on the primary concerns of the climate action recommendations ranked in the four areas (multiple choice), and an open-ended question to be able to explain their answer. Finally, the last question was an open-ended question asking what other actions/programs on climate action the business wanted to see implemented by the City of Longmont. Businesses were not asked about their demographics.

Analysis

Quantitative (closed-ended ranking questions): the analysis of ranking questions was based on a weighted ranking where a top-ranking was valued higher than a bottom ranking and represented in a ranking graph. A subgroup analysis was made using demographic parameters (ethnicity/race, household income and age), choosing comparison subgroups in each particular demographic, such as ethnicity/race (white vs. non-white), household income (<$50k, $50k-$99k, >$100k), and age (<34y, 35y-64y, >65y).

Qualitative (open-ended questions): the method used to analyze the open-ended questions was a word pattern analysis where all responses were reviewed for common words and themes. The *themes* outlined below were identified by looking for a repetition of ideas in the open-ended questions. An idea was considered a theme if five percent or more of individual responses to a question included the theme, represented by a key word, word cluster, and/or phrase. Total percent of theme occurrence was calculated using Microsoft Excel's COUNTIF function to sum all survey responses containing the identified theme, then a simple percentage was calculated using that sum and the total response rate per question. The analysis also included identification of *outliers,* which were determined by identifying responses that differ significantly from other responses to the question being asked, and that were represented by less than 3% of respondents.

Responses

A total of 352 resident questionnaires were completed (347 English, 5 Spanish), and 20 business questionnaires were completed (19 English, 1 Spanish).

Limitations

Given the concurrent development of recommendations from the Climate Action Task Force and the community outreach and engagement activities, the questionnaire did not include the actual

recommendations from the Task Force. Questions were developed based on an understanding of the anticipated direction of select recommendations as well as relevance to residents and businesses.

Results from the questionnaire should not be considered as statistically significant, as the questionnaire was not designed or vetted for statistical significance.

The questionnaire was set up as a forced choice ranking where respondents had to rank answers from most to least preferred. Respondents were not able to express that they did not prefer any of the options (i.e., a none-of-the-above option), and they were not able to skip the ranking questions. At least two people did not participate in the questionnaire for this reason and expressed their concerns to City Sustainability Staff. Additional respondents to the questionnaire expressed that they did not prefer any of the climate actions.

The appendix of this report includes a quantitative analysis and graphs of the ranking questions for each section and well as a summary of the open-ended questions by question.

KEY FINDINGS / SUMMARY OF RESULTS

The respondent's comparison with the city population showed an underrepresentation of younger groups (<25 years 1% vs. 34% city), low income (<50k annual household income 16% vs. 29% city), Hispanic/Latino (6% vs. 26% city) and similar participation of describing themselves as white respondents (82% vs. 87% city).

Overarching Themes of the Responses: There were three distinct ideologies that were represented in the responses to the questionnaire.

- Respondents who were generally amicable to changes, incentives, and climate actions.
- Respondents who expressed concern that the government should not raise taxes or subsidize climate action, giving preference to market-based solutions.
- Respondents who generally expressed interest in increasing services and benefits for low-income communities, while minimizing negative impacts (e.g., affordability).

Affirmative responses to the climate actions outweighed negative responses, though strong opposition positions were expressed.

Resident Questionnaire

- The questionnaire resulted in substantial participation (352 answers) in a short period (18 days), with a completion rate of 97%.
- On building energy use, expanding incentives for home energy efficiency measures, was ranked as the highest priority. This ranking was consistent between different income, age, and ethnic/racial groups. Residents identified the “incentives and reducing costs” and “increase in home energy efficiency and weatherization” as positive impacts and “increase in costs” and “energy scores” as negative impacts.

- On transportation, improving bus services and bike connectivity were ranked as the highest priority. This ranking was consistent between different income, age, and ethnic/racial groups. Residents identified the "increase in cycling infrastructure and quality," "improving bus coverage and connectivity" and "improving public transport connectivity with Denver metropolitan area" as positive impacts and "cost related to electric vehicles," "bike lanes quality" and "poor coverage and use of the bus network" as negative impacts.
- On renewable energy, providing incentives for residents to install solar electricity panels on homes ranked as the highest priority. This ranking was consistent between different income, age, and ethnic/racial groups. This ranking was consistent between different income, age, and ethnic/racial groups. Residents identified "solar, with emphasis on support for community solar," "energy incentives," "appliance replacements with strong emphasis on support for replacements for low-middle income citizens" and "reduction in renewable energy cost" as positive impacts and "impact on taxes and energy costs" as a negative impact.
- On workforce development, creating and funding programs to train and place workers in clean energy jobs in-home energy efficiency retrofits and weatherization ranked as the highest priority. This ranking was consistent between different income, age, and ethnic/racial groups. Residents identified "training opportunities, with emphasis on training for home retrofits and weatherization" and "job creation, with emphasis on manufacturing for renewable energy systems" as positive impacts and "government involvement" and "related increased taxes" as negative impacts.
- The top two primary concerns related to the climate actions included in the questionnaire were "Added cost to you or your family" and "Negative impacts to housing affordability." These results were consistent between different income, age, and ethnic/racial groups.

Business Questionnaire

Given the number responses to the business questionnaire, the analysis for the business responses focused on the open-ended questions. The questionnaire was responded by 20 business, with a completion rate of 100%.

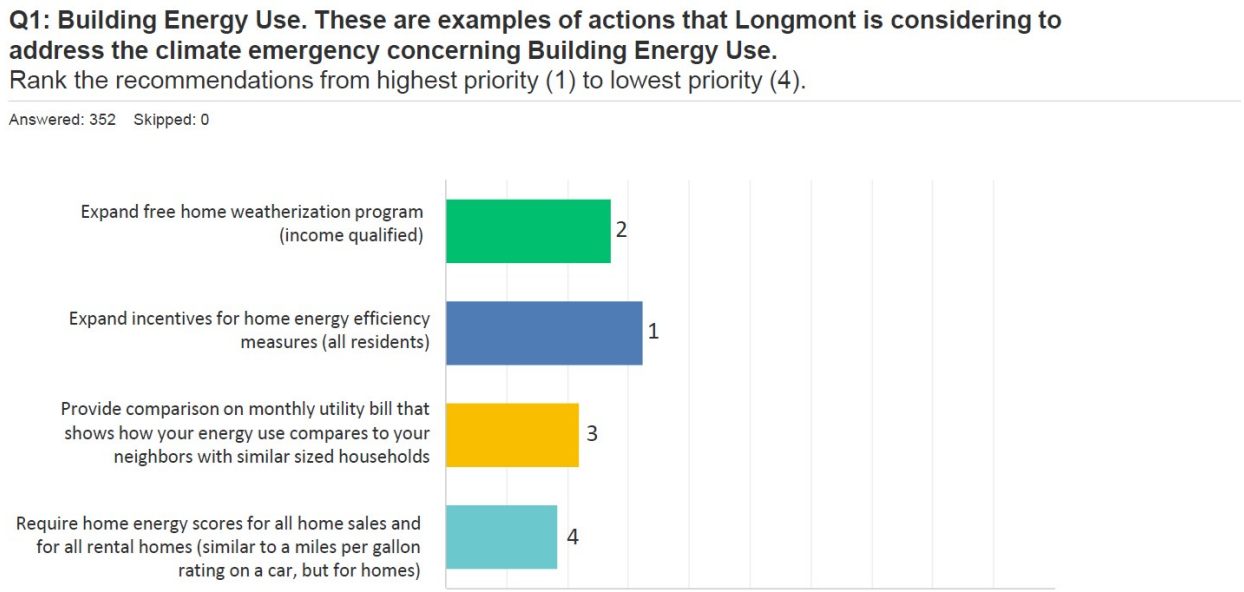
- For the building energy use recommendations, businesses identified the "increase energy incentives to reduce utility costs" as a positive impact and cost-competitiveness as a negative impact.
- For the transportation recommendations, businesses identified the "incentivize alternative mode of transports" and "invest in passenger trains and RTD" as positive impacts, and "bus pollution and related congestion" and "affordability of electric vehicles" as negative impacts.
- For the renewable energy recommendations, businesses identified the "new buildings without gas," "commercial solar electricity programs" and "solar and wind power incentives and resources for businesses" as positive impacts, and "economic impacts of eliminating natural gas" and "concerns over the practical implementation of renewable energies" as negative impacts.

- For the workforce development recommendations, businesses identified no or low positive impact, and "the harm caused by increased taxes" and "inefficient training and job creation" as negative impacts.
- The primary concerns related to the climate actions included in the business questionnaire were "concern for increased costs, taxes, and overall affordability," "focusing on transportation," "skepticism toward government intervention," and "the concern for the capacity of government and public."

ANALYSIS BY QUESTION

Resident Questionnaire

RQ1 - Resident – Building Energy Use Ranking



RQ2 - Resident – Building Energy Use Positive

Question. What recommendations do you see as having the most positive impact to you and your community, and why?

Answered/skipped: 280/72

Qualitative / Open-Ended Questions

- Themes
    - Incentives and reducing costs.

    - Increasing home energy efficiency.
    - Increasing home weatherization.
- Outliers
    - None of them will have a positive impact. All of them will hurt the economy.
    - No more regulations or requirements for homeowners trying to rent or sell their home.
- Quotes
    - “Incentives are a great way to get people on board with becoming more sustainable.”
    - “Incentives for increasing home energy efficiency could really improve things.”
    - “Saving energy seems best as it is fast, low cost, and quick to implement.”
    - “Requiring owners of rental houses or companies that manage these properties to implement it in them.”
    - “We need to subsidize the low-income community.”

RQ3 - Resident – Building Energy Use Negative
Question. What recommendations do you see as negatively impacting you or your community, and why?

Answered/skipped: 260/92

Qualitative / Open-Ended Questions

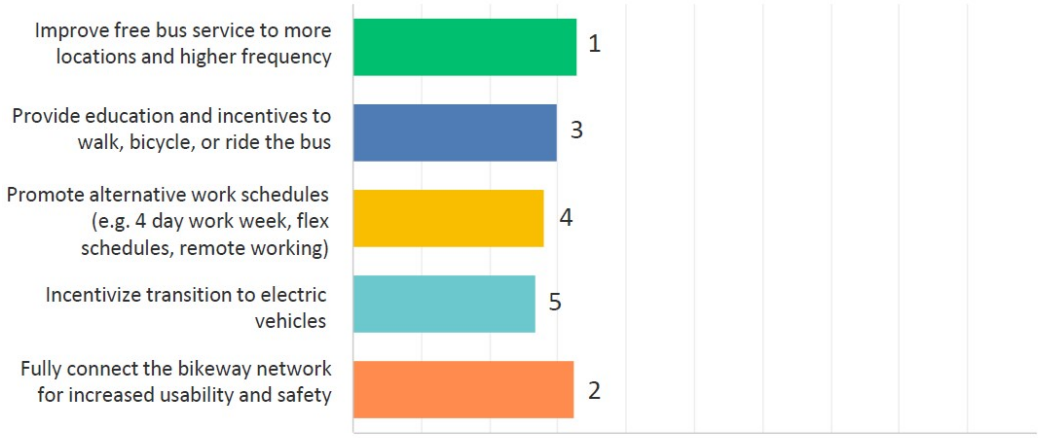
- Themes
    - No negative impacts.
    - Increase in costs for homeowners and renters.
    - Energy scores being ineffective and impacting on costs.
- Outliers
    - None.
- Quotes
    - “I see no negative impacts on changing behaviors to reduce climate changes.”
    - “The cost. Not all homeowners would have the financial resources unless a program was in place for every home to take advantage of. A tax credit as well.”
    - “Forcing homes that can't afford the upgrades, to make the upgrades.”
    - “Energy rating, since it would disproportionately characterize older homes as less efficient.”
    - “The comparatives and ratings are interesting, but do nothing in themselves to help cure the problem of home energy waste.”

- "Worry about accuracy of home energy scores and their effect upon home values."

RQ4 - Resident – Transportation Ranking

Q4: Transportation. These are examples of actions that Longmont is considering to address the climate emergency concerning Transportation.
Rank the recommendations from highest priority (1) to lowest priority (5).

Answered: 352 Skipped: 0



RQ5 - Resident – Transportation Positive
Question. What recommendations do you see as having the most positive impact to you and your community, and why?

Answered/skipped: 277/75

Qualitative / Open-Ended Questions

- Themes
  - Increase cycling infrastructure and quality.
  - Improve bus coverage and connectivity.
  - Improve public transport connectivity with Denver metropolitan area.
- Outliers
  - Increase the tax on gasoline and use the money to fund public transportation services.
  - Limiting housing development.
- Quotes
  - "Making biking easy and accessible will encourage more people to bike."

- "Fully connect the bikeways. There should be north/south and east/west bikeways that are at least mostly non-stop and are continuous."
- "Make Longmont more bike friendly."
- "Providing better access to the bus service into all sections of the community so we may choose to ride a bus instead of driving ourselves."
- "More effective citywide bus service."
- "Downsize the buses - make them more frequent and cleaner."
- "Expand the bus transportation as well as include light rail or rail of some sort to Denver and DIA."

RQ6 - Resident – Transportation Negative

Question. What recommendations do you see as negatively impacting you or your community, and why?

Answered/skipped: 250/102

Qualitative / Open-Ended Questions

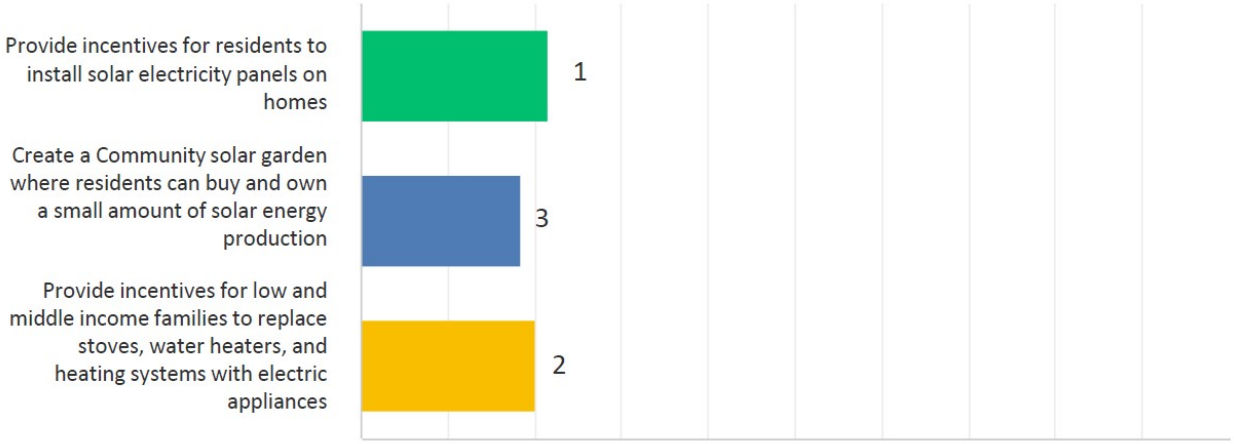
- Themes
  - Electric vehicle costs.
  - Inequities related to electric vehicles.
  - Bike lanes quality.
  - Poor coverage of the bus network.
  - Costly, empty and dirty buses.
- Outliers
  - Increase the tax on gasoline and use the money to fund public transportation services.
  - Not having light rail.
- Quotes
  - "Most people can't afford an electric vehicle."
  - "EVs are so inaccessible still so don't prioritize those yet."
  - "Incentivizing transitions to EVs is really just subsidizing the rich when they buy an EV."
  - "Bike routes need to be safer than white paint on a shared roadway. Too risky! Build dedicated bike paths."
  - "Free buses add a significant cost and rarely go where employed people need them to go."
  - "Buses riding nearly empty, again, increase traffic and emissions."

- “More lanes for more empty busses. How about we do smaller busses?”

RQ7 - Resident –Renewable Energy Ranking

Q7: Renewable Energy. These are examples of actions that Longmont is considering to address the climate emergency concerning Renewable Energy.
Rank the recommendations from highest priority (1) to lowest priority (3).

Answered: 352 Skipped: 0



RQ8 - Resident – Renewable Energy Positive

Question. What recommendations do you see as having the most positive impact to you and your community, and why?

Answered/skipped: 259/93

Qualitative / Open-Ended Questions

- Themes
  - Solar, with emphasis on support for community solar.
  - Energy savings Incentives.
  - Appliance replacements with strong emphasis on support for replacements for low/middle income citizens.
  - Cost and affordability.
- Outliers
  - Public transportation.
  - Education opportunities.

    - Building codes.
    - Residential water use.
    - None (15 responses were opposed to all choices).
- Quotes
    - “Custom solar is only feasible for some households. Community solar would help a lot more people buy into renewables.”
    - “Replacing inefficient appliances will reduce energy usage. Giving help to the poor will make this happen and their appliances are usually not working well. Solar is a good idea, but incentives keep the prices of solar infrastructure too high.”
    - “All of the above. This has to be a multi-pronged approach.”
    - “None of the above. More practical to make sure people are using energy wisely.”

RQ9 - Resident – Renewable Energy Negative

Question. What recommendations do you see as negatively impacting you or your community, and why?

Answered/skipped: 234/118

Qualitative / Open-Ended Questions

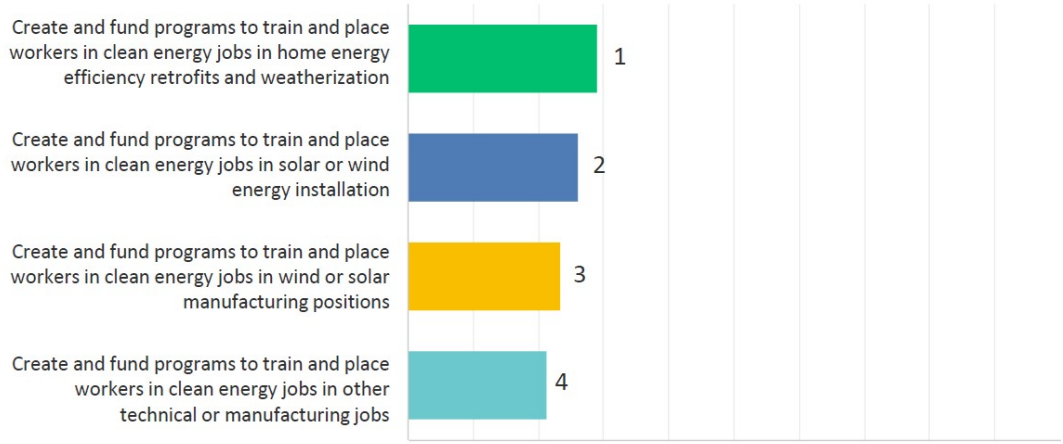
- Themes
    - Cost, expensive, and increased taxes.
    - Effectiveness.
    - None (37 responses expressed that they identify no negative impacts).
- Outliers
    - Price-based counter incentives (i.e., charge solar collector owners more on their electric service bill).
    - Return on Investment of solar installing is too long.
    - Residents need to have options and the right to choose.
    - Need for low-income housing and equitable pricing.
- Quotes
    - “Increasing electricity usage, when that is not from a renewable source can be counterproductive.”
    - “I know my HOA doesn't like solar panels, so incentivizing them wouldn't help me.”
    - “The cost of heating a home and the high cost of purchasing more energy-efficient heating systems.”
    - “Not sure what owning a part of a community solar garden would mean.”

- "All of them. Tax, tax, and tax some more. That is how incentives are paid."

RQ10 - Resident – Workforce Development Ranking

Q10: Workforce Development. These are examples of actions that Longmont is considering to address the climate emergency concerning Workforce Development.
Rank the recommendations from highest priority (1) to lowest priority (4).

Answered: 352 Skipped: 0



RQ11 - Resident – Workforce Development Positive

Question. What recommendations do you see as having the most positive impact to you and your community, and why?

Answered/skipped: 234/118

Qualitative / Open-Ended Questions

- Themes
  - Training opportunities, with emphasis on training for home retrofits and weatherization.
  - Job creation, with emphasis on manufacturing for renewable energy systems.
  - None (27 of the respondents do not see the benefit of any recommendation).
- Outliers
  - Support for trade schools.
  - Reliance on free-market over government intervention.
- Quotes

- "Retrofitting old homes seems to make the most sense given the historic nature of our city. Manufacturing and installation would be a great skillset for a growing front range."
- "Make this all consolidated so we have a super well trained workforce and our community sets a standard. We have done it with gig and water. It is time to do it with energy."
- "These are all bad ideas-provide incentives so businesses can train the personnel they need. Longmont has no business training people for any of these jobs."

RQ12 - Resident – Workforce Development Negative

Question. What recommendations do you see as negatively impacting you or your community, and why?

Answered/skipped: 213/139

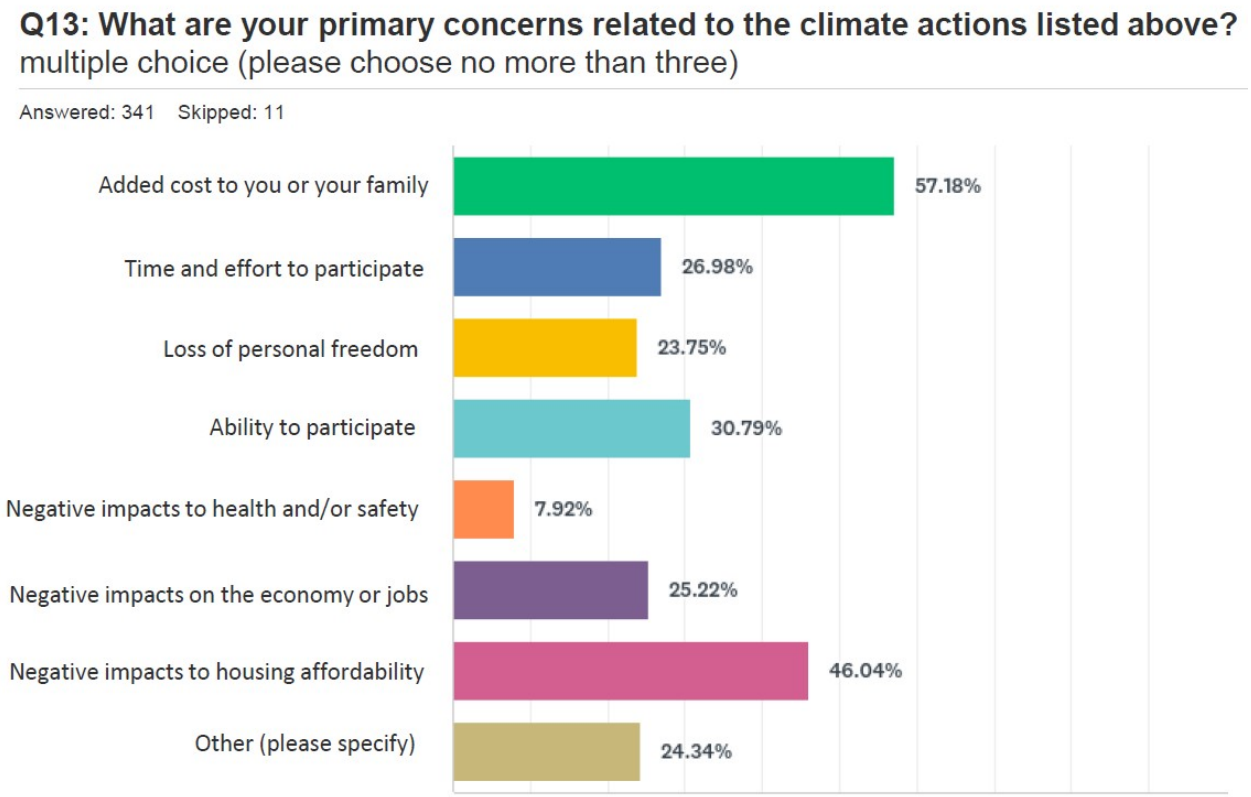
Qualitative / Open-Ended Questions

- Themes
  - Negative opinion toward government involvement (42 respondents express a preference for free-market job creation).
  - Increased taxes/use of tax dollars.
  - None (44 of respondents see no negative effects of these recommendations).
  - Unsure/don't know/ no answer (46 respondents).
- Outliers
  - Length of time required to implement.
  - Getting manufacturers on board.
  - Concern for keeping trained workers in the community.
  - Concern for the size of the clean energy job market (not big enough).
- Quotes
  - "Manufacturing jobs appeal to the greatest variety of people."
  - "We should utilize trade training in the school systems and perhaps add an additional adult ed session rather than recreating the wheel by developing ANOTHER job training center."
  - "I don't really see this as a top priority for funds at this time. If there is an option through public education for adults let the incentive be economic."
  - "Longmont has a long history in high tech manufacturing; and a minor history in service work, such as installation. We will not have to import knowledge and skill. Many

innovations in energy have been created in Longmont and then produced somewhere else. Part of the incentive of having a robust energy industry is keeping that manufacturing here in Longmont. If cheap labor is the reason to leave Longmont - what incentive keeps that labor here?"

- "All of them. Gov't should not be in the business of picking economic winners and losers."

RQ13 - Resident – All Categories Concerns



RQ14 - Resident – All Categories Concerns
Question. Open comment to explain your previews answer.

Answered/skipped: 186/166

Qualitative / Open-Ended Questions

- Themes
  - Concern for added costs and expenses.

    - Concern for reduced housing affordability.
    - Overall concern toward classism and inclusion of the low-income community.
- Outliers
    - All recommendations seem affordable.
    - Concern for aging/elderly population and long-term mobility.
    - Concern for data collection and unethical data sharing of community members.
- Quotes
    - “All changes need to be gradual. Rapid changes can cause unintended negative consequences like loss of jobs, high housing costs, and businesses shutting down.”
    - “Negative comments are a result of declaration of an "emergency" rather that rationally looking at the issue and solving it.”
    - “Families should not be forced to participate in climate related activities, especially if they don't have the resources to participate.”
    - “I'm very excited about Longmont's plans. I do feel that people will be skeptical if individuals and homeowners are asked to pay for upgrades and improvements.”
    - “The implementation of energy audits on homes in Boulder has only made things more expensive, more exclusive to the rich and less accessible to the lower wage earners. If we do that then what happens? Higher taxes to pay for an affordability problem that we created and exasperated.”
    - “Taking actions to address climate change has never been cheap or easy. To make lasting and impactful behavior change, we need to make these things (like renewable energy resources) more affordable and easily accessible.”

RQ15 - Resident – All Categories Additional Actions

Question. What other actions/programs would you want the City of Longmont to implement to address the climate crisis?

Answered/skipped: 234/118

Qualitative / Open-Ended Questions

- Themes
    - Improved waste infrastructure (recycling, compost, etc.).
    - Public education initiatives.
    - Improved transportation, with emphasis on EV’s, EV charging stations, and bikeways.
- Outliers

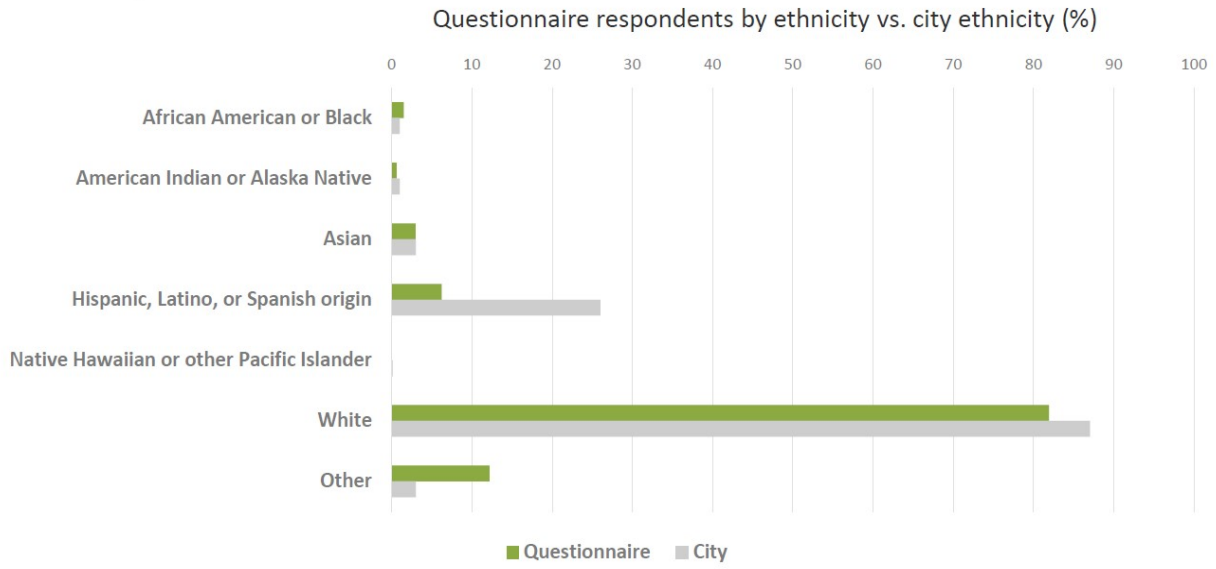
- Water – both use reduction and quality of lakes and rivers.
- Plastics reduction.
- Efficient bus services to schools.
- Support for local food.
- Wild space and outdoor access.
- Focus on greenways over bike paths.
- Better utilization of public space parcels (plant trees, urban woods, trails, recreation center).
- Force local car dealers to increase access to EVs.
- Fracking ban.
- Support for homeless population.
- Sustainable / regenerative agriculture.
- Smart metering.
- Encourage state and federal government to do more.

- Quotes
  - "The thing I have not thought of is how to switch to Wind/Solar from the City. If there was something like a Credit Union for Power that I could invest in and be a part of, that would be even better."
  - "Continue on this path as it will open discussion in our community and education is invaluable."
  - "None. I would like the City to take care of what has traditionally been viewed as City business. Street maintenance, law enforcement, parks, etc... I would like to see the St. Vrain watershed protected by vigorous elimination of transient encampments."
  - "Water quality and possible pollution sources as we grow as a manufacturing economy."

RQ16 - Resident – Ethnicity

Q16: Which category or categories describes you? (Check all that apply)

Answered: 337 Skipped: 15



RQ17 - Resident – Household Income

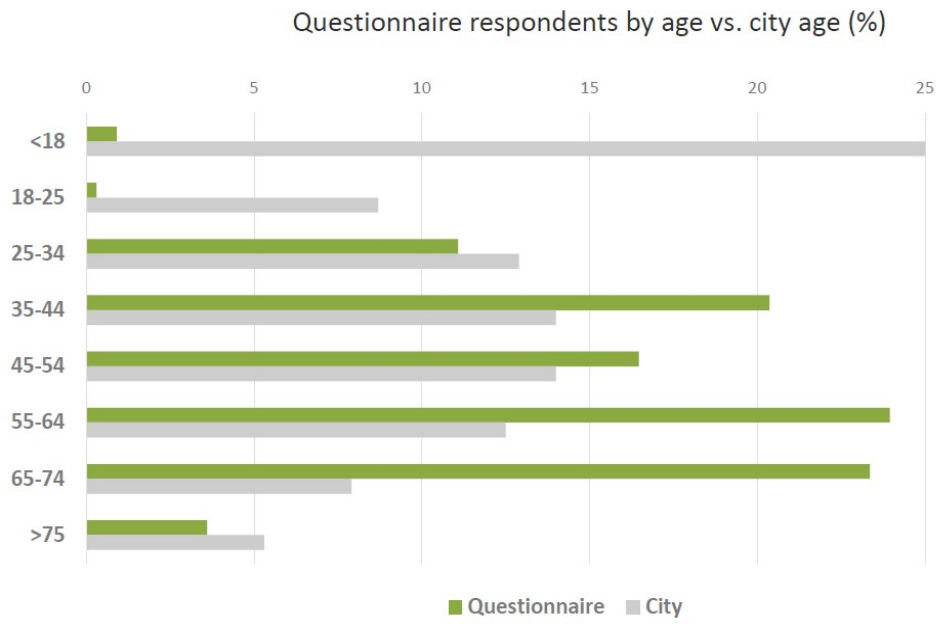
Q17: Which of the following categories best describes your household income? Please add up all income from all people living in your home. (Check one)

Answered: 313 Skipped: 39

RQ18 - Resident – Age

Q18: Which of the following categories best describes your age? (Check one)

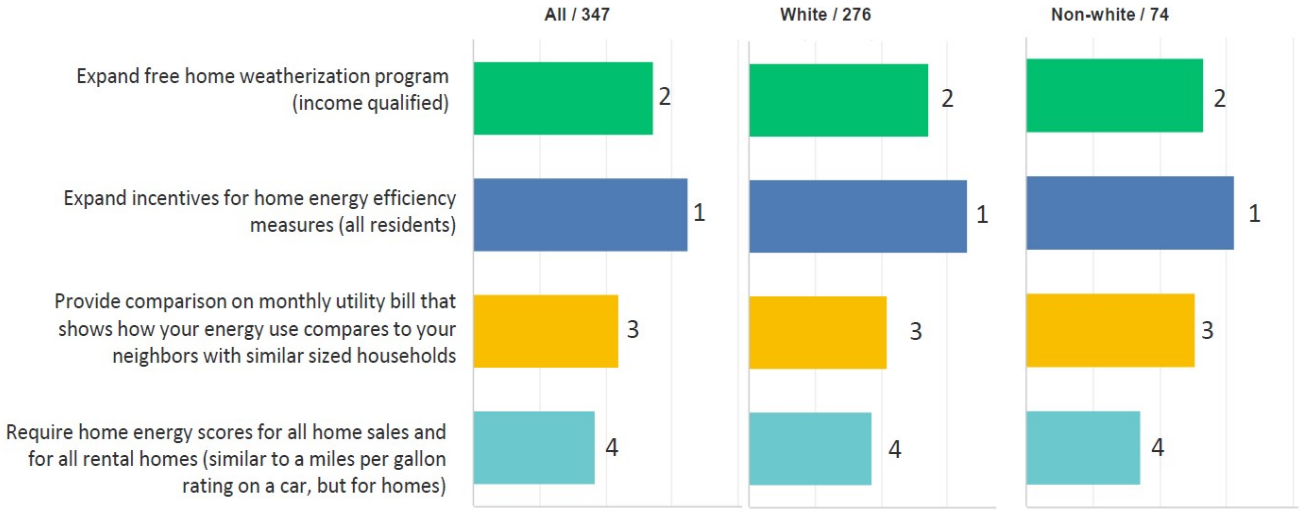
Answered: 334 Skipped: 18



Resident - Subgroup Analysis

Q1: Building Energy Use.
These are examples of actions that Longmont is considering to address the climate emergency concerning Building Energy Use. Rank the recommendations from highest priority (1) to lowest priority (4).

Group / # answers



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Group / # answers

Q1: Building Energy Use.
These are examples of actions that Longmont is considering to address the climate emergency concerning Building Energy Use. Rank the recommendations from highest priority (1) to lowest priority (4).

Group / # answers

Q4: Transportation.
These are examples of actions that Longmont is considering to address the climate emergency concerning Transportation. Rank the recommendations from highest priority (1) to lowest priority (5).

Group / # answers

Q4: Transportation.
These are examples of actions that Longmont is considering to address the climate emergency concerning Transportation. Rank the recommendations from highest priority (1) to lowest priority (5).

Group / # answers

Q4: Transportation.
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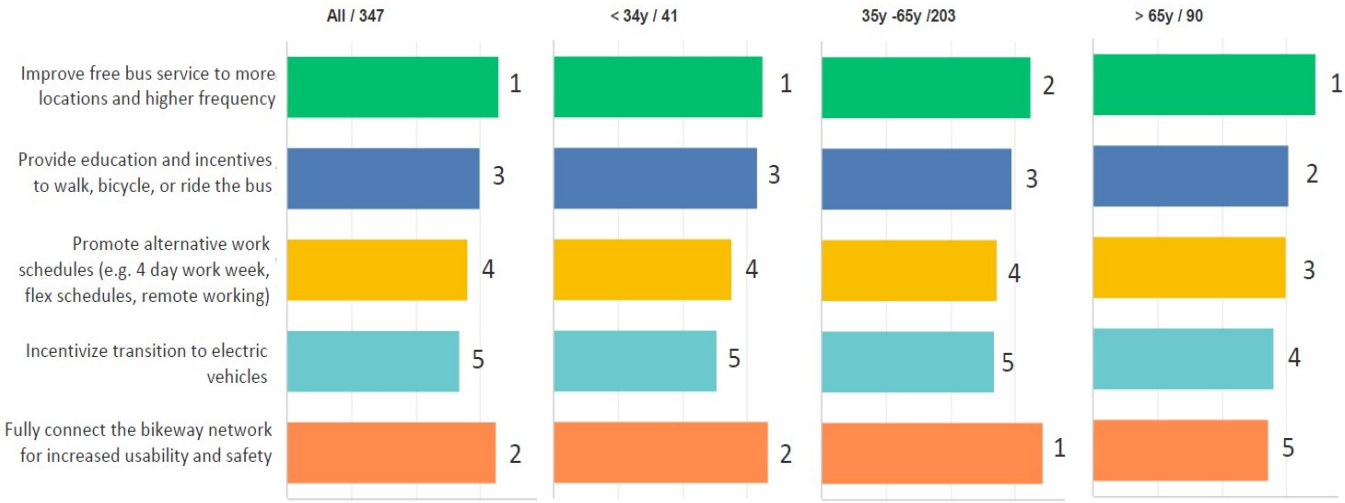
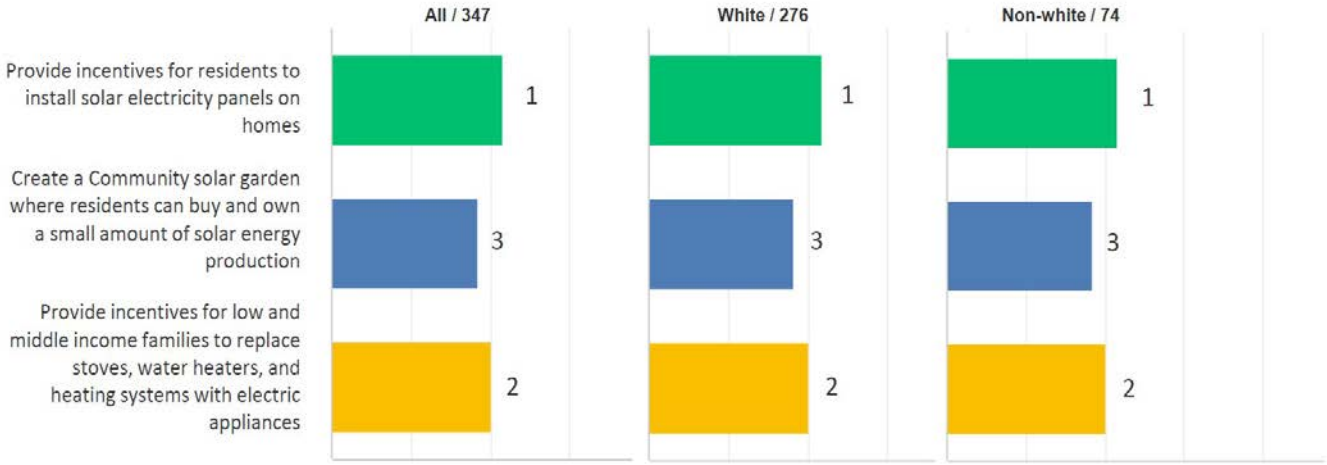
Group / # answers



Q7: Renewable Energy.
These are examples of actions that Longmont is considering to address the climate emergency concerning Renewable Energy. Rank the recommendations from highest priority (1) to lowest priority (3).

Group / # answers



Q7: Renewable Energy.
These are examples of actions that Longmont is considering to address the climate emergency concerning Renewable Energy. Rank the recommendations from highest priority (1) to lowest priority (3).

Group / # answers

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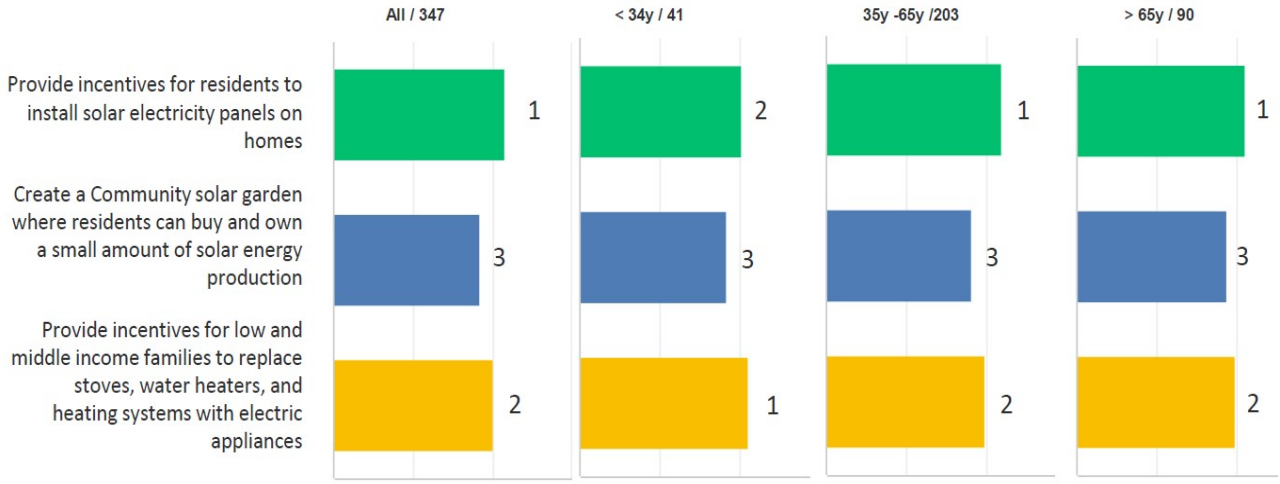
Group / # answers



Q10: Workforce Development.
These are examples of actions that Longmont is considering to address the climate emergency concerning Workforce Development. Rank the recommendations from highest priority (1) to lowest priority (4).

Group / # answers

Q10: Workforce Development.
These are examples of actions that Longmont is considering to address the climate emergency concerning Workforce Development. Rank the recommendations from highest priority (1) to lowest priority (4).

Group / # answers

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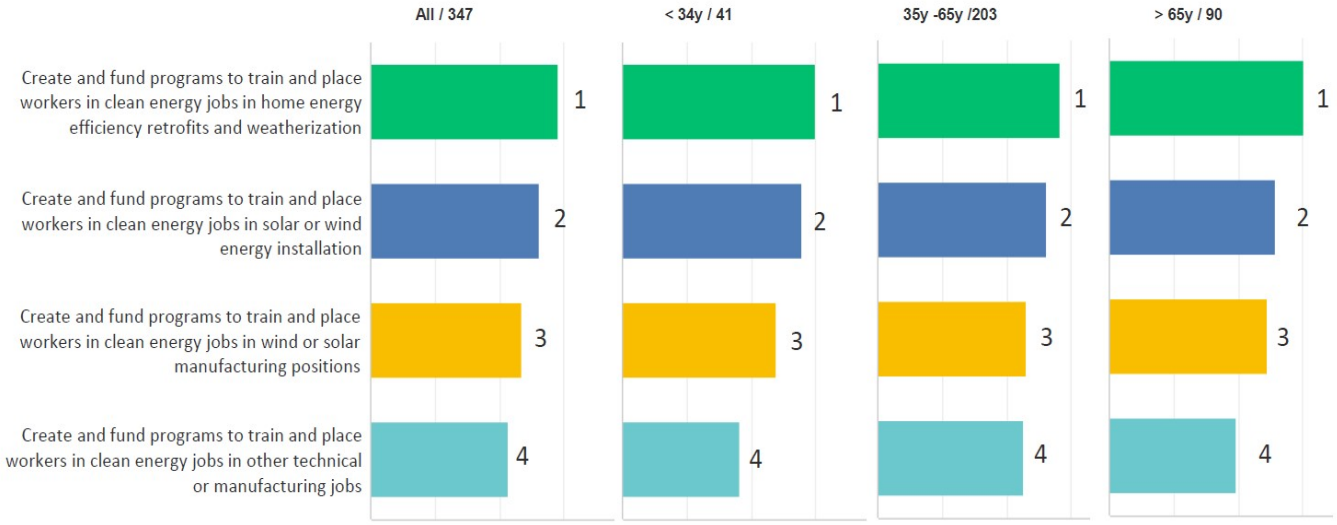
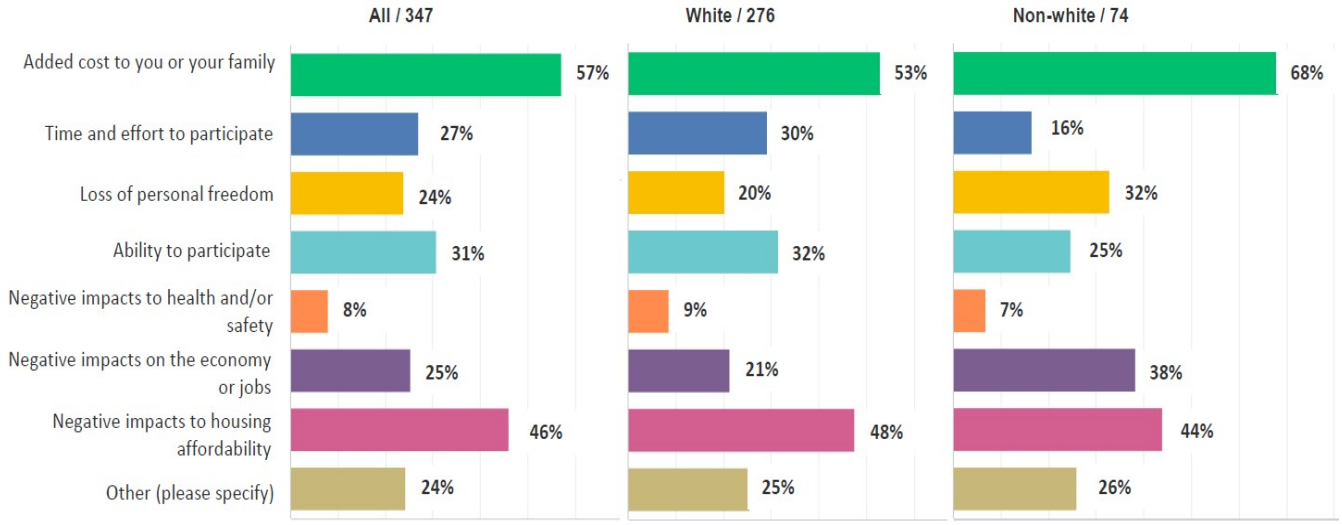
These are examples of actions that Longmont is considering to address the climate emergency concerning Workforce Development. Rank the recommendations from highest priority (1) to lowest priority (4).

Group / # answers



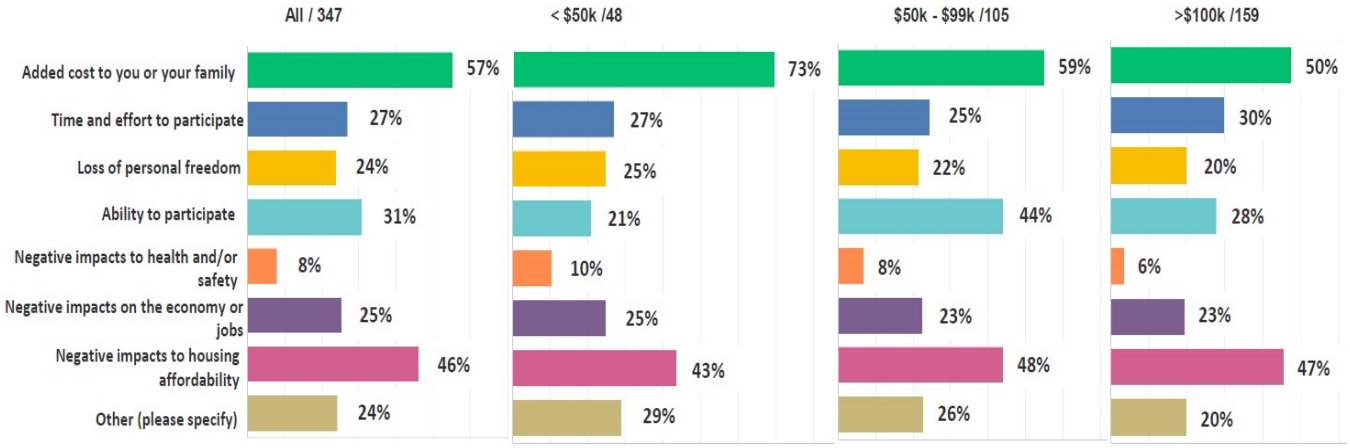
Q13: What are your primary concerns related to the climate actions listed above? – multiple choice (please choose no more than three)

Group / # answers



Q13: What are your primary concerns related to the climate actions listed above? – multiple choice (please choose no more than three)

Group / # answers



Business Questionnaire

BQ2 - Business – Building Energy Use Positive

Question. What do you see as having the **most positive impact** to your business or organization, and why?

Answered/skipped: 17/3

Qualitative / Open-Ended Questions

- Themes
  - Increase energy incentives.
  - Less utility cost.
- Outliers
  - Government program that wastes tax dollars.
- Quotes
  - "Most of the carbon emissions in the US come from commercial and industry sources, so incentivizing businesses to take a more focused look at energy efficiency would be a good step forward."
  - "As a Roofing Contractor, we always want to be aware of how we can do business differently and eco-friendlier. If we can convince commercial building owners to increase energy efficiency like applying ENERGY STAR commercial roof products that reflect most of the UV to keep A/C costs down, we help tremendously, and the building owners save money. Restoring roofs instead of replacing also cuts down on landfill use."

BQ3 - Business – Building Energy Use Negative

Question. What concerns do you see as **negatively impacting** your business or organization and why?

Answered/skipped: 16/4

Qualitative / Open-Ended Questions

- Themes
  - Reducing cost-competitiveness of Longmont compared with alternative locations.
  - Industry produces much more greenhouse gases compared to households.
- Outliers
  - Traffic and bad roads due to government doing unnecessary programs.
- Quotes

- “Making a business or home more efficient requires an enormous amount of materials, labor and transportation. The "embodied energy" of making more efficient buildings is just a tax on those that can afford it and in the long run makes the housing market unattainable for those lower- and middle-class families. Just look at Boulder....there's your future.”
- “People getting confused or not aware on how to use energy efficiency programs can make it difficult for us as contractors to explain.”
- “As one flies over the cities, one can see that businesses use many thousands of lights/energy at night by comparison to the residents! We in the business community need to be aware of our wasted energy and do something about it. If we do not measure and control our energy, we will continue to waste energy.”

BQ5 - Business – Transportation Positive

Question. What do you see as having the **most positive impact** to your business or organization, and why?

Answered/skipped: 15/5

Qualitative / Open-Ended Questions

- Themes
  - Incentivize alternative modes of transport (walking and cycling).
  - Invest in passenger trains and RTD
- Outliers
  - None of these would really have much of an impact on my business either positively or negatively.
- Quotes
  - “Safe walkways and bikeways.”
  - “Bikeway to improve employee health.”
  - “Trains are the most efficient way of transportation. We should work hard to get RTD and other organizations to bring the commuter trains to Longmont before 2030.”

BQ6 - Business – Transportation Negative

Question. What concerns do you see as **negatively impacting** your business or organization and why?

Answered/skipped: 14/6

Qualitative / Open-Ended Questions

- Themes
  - Perception that buses pollute more than a car and favor congestion.
  - Affordability of electric vehicles.
- Outliers
  - Don't believe e-cars are the solution.
- Quotes
  - "Increase in truck routes, if people are not educated about the use of the bus, this alternative would not work in any way, otherwise, it would be more contaminated by the use of trucks that do not carry any passenger."

BQ8 - Business – Renewable Energy Positive

Question. What do you see as having the **most positive impact** to your business or organization, and why?

Answered/skipped: 15/5

Qualitative / Open-Ended Questions

- Themes
  - New buildings without gas.
  - Commercial solar electricity program.
  - Solar and wind power incentives and resources for businesses.
- Outliers
  - None of these would really have much of an impact on my business either positively or negatively.
- Quotes
  - New construction without gas, if you are thinking of transcending the Project, it is better that the new homes are already adequately equipped for future needs and do not generate extra expenses later. The same as helping to put solar panels on existing homes.
  - What about creating a commercial solar electricity program? Commercial buildings have much larger roof areas to tap for solar panels, and it's nearly all unused!

BQ9 - Business – Renewable Energy Negative

Question. What concerns do see as negatively impacting your business or organization and why?

Answered/skipped: 14/6

Qualitative / Open-Ended Questions

- Themes
  - Economic impacts of eliminating natural gas: increased energy cost, decreased job competitiveness, disparate property value.
  - Concern over practical implementation: those with older infrastructure will face higher switching costs.
- Outliers
  - Work for NG customers will be impacted.
- Quotes
  - "Don't outlaw natural gas or disincentivize it! It's a low cost, very efficient, clean fuel. When electric rates increase in the future (as is guaranteed to happen if now-gas loads transition to all electric) the high cost of utilities will become a hardship on businesses and citizens compared with locations that haven't outlawed gas. Don't become the Berkeley California of Colorado."
  - "…the houses with pure electricity would have a higher value than those houses that do not have the renovation, updating an electrical system is expensive, between panels and appliances, the prices are lower than what the community can sustain."

BQ11 - Business – Workforce Development Positive

Question. What do you see as having the most positive impact to your business or organization, and why?

Answered/skipped: 14/6

Qualitative / Open-Ended Questions

- Themes
  - No/low impact.
  - No need for government involvement.
  - Possibility of long-term job security.
- Outliers
  - None.
- Quotes

- "Other cities funded universities, and the educated people left for other communities, even out of states. It is best to create the jobs first, then add or pay for educational endeavors."
- "Nothing of the above is positive. Let the market economy work. Leave people and businesses alone!"
- "I do not know the labor issue, but I would care that they were not jobs that only lasted the 10 years of transition, but rather that they had a source of employment after finishing the project."

BQ12 - Business – Workforce Development Negative
Question. What concerns do see as negatively impacting your business or organization and why?

Answered/skipped: 11/9

Qualitative / Open-Ended Questions

- Themes
  - Harm caused by increased taxes.
  - Inefficient training and job creation.
- Outliers
  - Lack of resources.
- Quotes
  - "Government 'help' almost always causes dislocations and is very inefficient. If you want to help local businesses train people CUT OUR TAX RATES, because we are vastly more efficient than government at identifying and training people as needed for relevant jobs."
  - "Government creating funds and becoming Boulder."
  - "Assessing or extracting dollars to create and fund programs is a negative impact."

BQ14 - Business – All Categories Concerns
Question. Open comment to explain your previews answer.

Answered/skipped: 13/7

Qualitative / Open-Ended Questions

- Themes
  - Concern for increased costs, taxes, and overall affordability.
  - Focus on transportation.

    - Skepticism toward government intervention.
    - Concern for capacity of government and public.
- Outliers
    - Building stock will become more valuable.
    - Work on the homeless problem.
- Quotes
    - "The buses that RTD provides are giant, polluting diesel beasts that NO ONE rides, unless they are riding for free, which tends to be pretty much everyone...unless you have a job and are a responsible citizen. You could reduce the pollution and CO2 emissions of the City by a greater effect, just by using smaller, maybe electric, vans for local transport. You could get us the commuter rail. You could look at the major inefficiencies of Longmont's Ice Pavilion, Sandstone Ranch (light pollution) or public works buildings. So many ways to ACTUALLY make change happen....but I guess it's just easier to impose a tax on everyone...Yay!"
    - "People are so busy just trying to work enough to pay their bills that educational programs, participation, etc. may be difficult to gather enough support to have any significant impact."

BQ15 - Business – All Categories Additional Actions
Question. What other actions/programs would you want the City of Longmont to implement to address the climate crisis?

Answered/skipped: 12/8

Qualitative / Open-Ended Questions
- Themes
    - None.
    - Need for education.
- Outliers
    - Divest from fossil fuels.
    - Water usage (residential and agricultural).
    - Reporting and promotion of climate action, while encouraging the market to act.
    - Recycling program for asphalt shingles.
    - Free or low-cost windshield covers to decrease vehicle warmup time.
    - Promote "engine off" while waiting for trains to clear crossings.
    - Eliminate fracking.

    - Reforestation.
    - Lower school temperatures.
    - Remove cooling systems in the summer.
- Quotes
    - “Remember the sixties when litter was common place? Government lead campaigns were successful in greatly reducing the bad habit, similar results can be accomplished for reducing carbon monoxide, saving petroleum products (gasoline, engine oil), etc.”
    - “NONE! And please reconsider the actions you're already planning. They extend way beyond the reasonable scope of local government. Or, spend your personal money to go to China and appeal to Xi to reduce his CO_2 emissions.”

Outreach Activity Report

Summary of in-person outreach activities related to Climate Action

Tabling at the Senior Center

Location: Senior Center
Date: 2/21/2020
Time & Duration: 3-5 pm
Number of attendees: ~32
Type of audience (e.g., general public, Latino, elderly, advisory board)**:** Older adults
Type of activity (e.g., table, session)**:** Table at the Senior Center during their Trip Registration day. Question on a flipchart, participants could rank the importance of transportation that is accessible, affordable, safe, has non-car options, and is good for the environment.
Aim: Inform about the Climate Action Task Force and learn more about the most important transportation element for older adults.

Summary of Outcomes:

	Very Important	Somewhat Important	Not Important	Total Responses
Accessible	25	3	0	28
Affordable	19	7	2	28
Safe	30	0	1	31
Non-car options	14	7	6	27
Good for the environment	29	2	1	32

Transportation Feedback:

- Only one BOLT bus goes to Boulder every hour.
- Saw an empty bus going between 8th and Coffman and 23rd and main, but it wasn't picking up passengers.
- There are not many RTD options.
- RTD should be accessible for people who don't own cars.
- RTD is not good, it is inconvenient, inaccessible and it doesn't ride on Sundays to Denver.
- Saturdays are not good either. They keep cutting down routes.
- RTD is expensive for seniors. $10 round trip to Denver. Seniors should get discounts.
- RTD cut the middle of the day schedule.
- Two people complained about there not yet being a train to Longmont.
- General Public Transportation Feedback:
- People should be able to get to Denver without driving a car.
- Make simple maps for bus routes.
- Build more bike paths between Longmont Hospital and Longmont High School.

- Buses are not practical because older adults can't carry many things.
- Transportation is bad in Longmont. Accessibility for seniors is ridiculous (this individual was very passionate about their dislike of local transportation).

Electric Vehicle Comments:

- Old cars are affordable. Electric vehicles are too expensive. Do not demonize cars since they enable independence for older adults.

General Comments:

- Low-income people care about the environment too.
- Multiple respondents mentioned that their primary mode of transportation was a car.

Senior Citizens Advisory Board

Location: Senior Center
Date: 3/4/2020
Time & Duration: 10:30 – 11:00 am
Number of attendees: ~9
Type of audience (e.g., general public, Latino, elderly, advisory board)**:** Elderly
Type of activity (e.g., table, session)**:** Presentation
Aim: Inform about the Climate Action Task Force, inform about Questionnaire, in-person feedback.

Summary of Outcomes:
Transportation Feedback:

- Improve RTD quality and connectivity
- Improve bus stop information and space
- Increase information about free bus routes
- Modify bus to electric to reduce emissions and reduce bus size to favor frequency and increase occupancy
- Electric cars are not a priority for elderly
- Increase traffic safety form the pedestrian and cyclist perspective

Sent the questionnaire and PowerPoint to Michele to send out to the entire group.

Tabling at Linking Longmont

Location: Longmont Museum
Date: 3/4/2020
Time & Duration: 5-7 pm
Number of attendees: ~100
Type of audience (e.g., general public, Latino, elderly, advisory board)**:** General public, Transportation

Type of activity (e.g., table, session)**:** Table, Set feedback on Climate Action Recommendations that was based on the questionnaire.
Aim: Inform about the Climate Action Task Force, inform about Questionnaire, collect emails, and in-person feedback.

Summary of Outcomes:

- Cycling infrastructure, quality and investment should be a priority
- Teleworking have a greater impact, but government have low capacity to influence private workplaces
- Support active transport promotion and attractiveness
- Electric vehicle less relevant priority

Longmont Multi-Cultural Action Committee Presentation

Location: Civic Center
Date: 3/9/2020
Time & Duration: 12 – 1:30 pm
Number of attendees: ~30
Type of audience (e.g., general public, Latino, elderly, advisory board)**:** Multi-cultural residents, Action Committee
Type of activity (e.g., table, session)**:** Presentation
Aim: Inform about the Climate Action Task Force, inform about Questionnaire, in-person feedback.

Summary of Outcomes:
Transportation Feedback:

- Need to work with RTD
- Connect with businesses to educate employees, incentives for employees
- Two incentives that Sister Cities did:
    - Already happening: $10,000 any employees to buy a house in Longmont, if business here. Two employees did, two employees did not.
    - Incentives don't always work.
- Smart Growth, Boulder County
- Bus coach that can help teach people how to use the bus
- RTD in Longmont needs a lot of improvement, their system is incredibly complicated
- Coordinate with Weld County
- FRCC - engage the college, businesses that survey (Get Carla's information)
- Trains go 400 miles/gallon. Taxes for a train since 2000, push from 2030 to 2040. Help Mayor push for 2030, increase taxes if it could be done earlier.
- Handicapped woman, 1 hour wait, takes awhile
- School district runs buses, those within 5 miles of the school can use the free bus, don't run a double bus system

General: Work with Silvercreek Sustainability Group

Sent the questionnaire and PowerPoint to Adriana to send out to the entire group.

Tabling at OUR center

Location: OUR center
Date: 3/11/2020
Time & Duration: 12-1:30 pm
Number of attendees: ~10
Type of audience (e.g., general public, Latino, elderly, advisory board)**:** General public, low income, and Latino.
Type of activity (e.g., table, session)**:** Table, applying paper questionnaire, collect emails, and set feedback on Climate Action Recommendations using posters.
Aim: Inform about the Climate Action Task Force, inform about Questionnaire, in-person feedback.

Summary of Outcomes:

- Public transport should be a priority
- Increase bus route and frequency
- Improve sidewalks
- Increase cycling infrastructure in term of quality and safety
- Increase green jobs and training
- Reduce cost related to renewable energies
- Work with landlords to increase renewable energy implementation

Longmont Landlord Alliance

Location: Senior Center
Date: 3/11/2020
Time & Duration: 6:35 – 6:50 pm
Number of attendees: ~30
Type of audience (e.g., general public, Latino, elderly, advisory board)**:** landlords
Type of activity (e.g., table, session)**:** Short presentation with Q&A
Aim: Inform about the Climate Action Task Force, inform about Questionnaire

Summary of Outcomes:
Nearly all people in the audience took a postcard to participate in the online questionnaire.

Additional Community Feedback

The Longmont Sustainability Program received three emails expressing concerns with regards to the questionnaire and the stakeholder engagement process.

Comments:

- "I tried to take your questionnaire/survey. It is flawed. The way it asks for responses (ranking) indicates that you are in support of the items listed when you may not be in favor of any. There should be an allowed response that says none of the above. If you do not respond to the ranking it does not allow you to submit the survey."
- "I was recently asked to complete the City of Longmont Climate Action Questionnaire. It is not a questionnaire. It is a "push poll" (definition from https://www.lexico.com/definition/push_poll: "an ostensible opinion poll in which the true objective is to sway voters using loaded or manipulative questions"). Specifically, it assumes there are only three or four answers to each question that require ranking. There could be more answers, ranging from "do nothing" to "implement the Green New Deal." Important policy decisions are going to be made based on this push poll and cited as desires of the residents. As distributed, this "survey" is embarrassing and does not well represent the city or its leadership (both elected and administrative). Please withdraw this "survey" and issue a more representative and reliable one."
- "[Our company] is opposed to the programs that you are proposing. I want to make sure that our thoughts are represented accurately. Your survey does not allow for this. It requires you to rank several ideas about programs without the option to say "none of the above". Without that option it gives the false impression that we are in favor of them – we are not. We strongly suspect that the cost of the programs you are proposing will borne on the backs of businesses in Longmont and specifically by developers and home builders. This is not fair. I suspect that city council knows that they will not be able to fund their climate emergency projects with a tax increase so they will stick it on builders and ultimately consumers of new homes. Housing affordability is already a problem – do not make it worse."
- "I am very concerned that the Climate Action Plan is being rushed through without all stakeholder involvement. The contractor lunch and learn has been cancelled. Why couldn't this have been done via Skype or other? To eliminate business input is reprehensible. In addition, the survey that was sent out was improper - it forced a respondent to rank the ideas without an option of "none of the above". This gives the impression that you were in favor of the ideas when that may not have been the case at all! It also made no mention of how these "ideas" were going to be paid for. I'm sure it won't be through tax increases because that would never pass. The next likely source is fees to businesses - probably housing. So much for affordable housing.

  Please don't Boulder my Longmont!!!"