



City of Tempe, AZ

Pathways Analysis for Implementation

Project Summary

As the City of Tempe transitioned from planning to implementation of its Climate Action Plan, KLA was hired to perform a rapid assessment of emissions reduction potential from key strategy areas of the plan. This assessment was needed to guide resource decisions for the Office of Sustainability and partners within City government to begin making transformational change. First, this assessment identified the specific activities and sectors in the community that were contributing to the overall emissions represented in recently completed GHG inventory. This context – the “who” and the “how” - was a first step in completing a pathways analysis which mapped a pathway to achieving future GHG reductions, identified essential partners, and illustrated the level of change needed to meet reduction targets.

Timeline: December 2021 - March 2022

Project Highlight

Results of this analysis were presented at the Tempe City Council’s Work Study Sessions for budget development and were used to support decision about budget allocations to the Office of Sustainability. The analysis helped justify the need for a grants coordinator and other positions to implement the Climate Action Plan.

This project required getting up to speed quickly on key initiatives including current and planned investments in light rail and bus rapid transit to reinforce the need to continue these initiatives as core strategies.

“Wedge analysis” graphics illustrated the relative impact of strategies and the coordination and advocacy that would be required to stay on track.

Activities & Outcomes

- Assessment of emissions reduction potential of transit and infill development
- Calculation of co-benefits for green jobs development, property values, and energy dollars saved for each strategy
- Presentation of preliminary results to cross-department audience to help ensure the overall strategy aligned with citywide priorities before presenting to City Council
- Presentation of final results during the budget development session which led to robust support by the City Council to fund continued plan implementation by the Office of Sustainability

Costs and estimates of private-sector investments were paired with co-benefits to illustrate that transformation isn’t solely on the shoulders of local government and the private sector has much to gain by leaning into climate action.

Wedge Analysis Findings

Additional Strategies
The strategies and outcomes envisioned will lead to a 89% reduction in emissions.

- Building Efficiency
- Transportation Electrification
- Transit Oriented Development (TOD)

Transitioning to **100% renewable electricity** is critical for building and vehicle reductions

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Energy Reduction Investment

Energy Reduction Investment
About \$200 million/year investment in existing buildings to see reductions.

State of Properties	APR	SBP	Total
Commercial	42%	58%	100%
Residential	26%	74%	100%

Energy Reduction Impact

- 20% residential and 30% commercial energy reductions
- About 5,800 green jobs
- Additional \$300 million in commercial property value
- \$121 million/year annual energy cost savings

LEED Certified Tempe Transportation Center

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