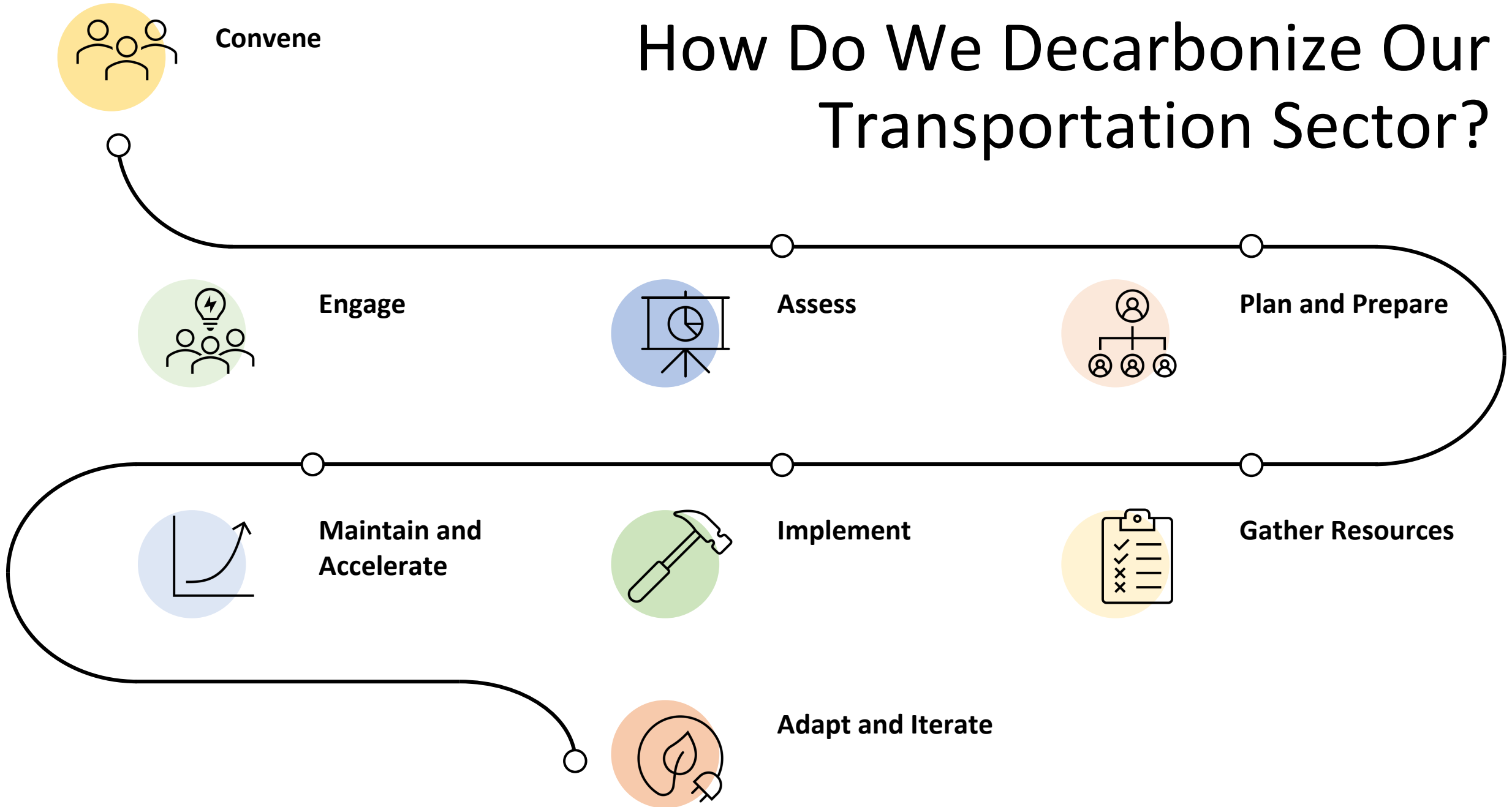


How Do We Decarbonize Our Transportation Sector?





Convene: Identify and map key partners, decision makers, and stakeholders

Who in our community will be most impacted by transportation system changes?

- Explore which census tracts in your community are vulnerable and have high transportation burden using SLOPE's [Data Viewer](#).
- In your planning discussions, consider the unmet needs of underserved communities by conducting a community needs assessment using Greenlining Institute's [Mobility Equity Framework](#).

Who should be involved in transportation and infrastructure planning within our city government? Who should we coordinate with at the regional and state level?

- Consider the list of potential city departments to include in Chapter I of Electrify the South's [Electric Transportation Toolkit](#).
- Pursue regional coordination and partnerships to achieve economies of scale using the chapter on promoting regional coordination in the Southeast Florida Regional Climate Change Compact's [Electric Vehicles and EV Infrastructure Guide](#).
- Make participation as easy as possible for stakeholders using NREL's [Best Practices in Community Energy Planning](#).

Which stakeholders have the expertise, influence, and resources necessary to inform plans and ensure success?

- Understand the role of local utilities in enabling and promoting EV adoption using Chapter IX of Electrify the South's [Electric Transportation Toolkit](#).
- Consider the stakeholders involved in [Florida's EV Roadmap](#) process.
- Document each stakeholder's role, impact, and interest in planning and implementation, and identify their appropriate level of engagement using a [stakeholder map](#).



Engage: Invite diverse perspectives, center community voices, identify stakeholder priorities, and develop a shared vision

Which geographic areas should we prioritize to improve transportation equity?

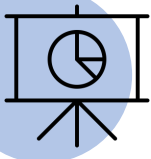
- Geospatially analyze grid characteristics relevant to charging infrastructure, locations of current EV corridors and DC fast charging stations, and sociodemographic characteristics using DOE's [Energy Zones Mapping Tool](#).
- Use tools from Electrify the South to [Expand Equity and Access](#) and [Promote Economic Development by Investing in Electric Transportation](#).

Which economic, environmental, and community resilience benefits matter most to our community and stakeholders?

- Discuss this question with stakeholders and consider SWEEP's reports on the [Benefits of Electric Vehicles for Businesses](#) and the [Benefits of Electric Vehicles for Local Governments](#).

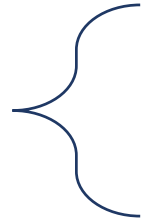
What is our shared vision of success?

- Create a shared vision of success to help guide conversations with stakeholders, build public support, attract investors, and bolster grant applications. Revisit Chapter 2 of NREL's [Guide to Energy Master Planning of High-Performance Districts and Communities](#) to learn how to create a shared vision and craft a compelling story for public messaging.
- Center the needs of affected communities in transportation planning and develop a people-based planning process using Greenlining Institute's [Mobility Equity Framework](#) and [Toolkit](#).
- Explore projections for energy consumption, CO₂ emissions, and technology adoption rates to help connect stakeholder visions and priorities to mobility, renewable energy, and decarbonization goals using SLOPE's [Scenario Planner](#).



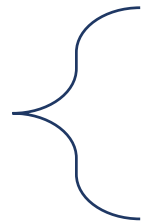
Assess: Map existing assets and analyze policy, market, societal, and technical barriers and opportunities

What is the current landscape for EV technologies and EV charging infrastructure in our region?



- Find the latest information for various fuel technologies, vehicle types, and fleet applications from the Alternative Fuels Data Center (AFDC), and map locations of existing alternative fueling stations and the density of different vehicles types using AFDC's TransAtlas to identify gaps.

What are the technical and operational factors that will affect our EV strategy?



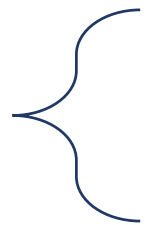
- Estimate the impact of EV charging on the local electric load profile in NREL's EVI-Pro Lite.
- To maximize alignment of EV charging loads with locally-generated renewable energy, consider grid-coordinated EV charging and the various charging deployment scenarios on pages 110–111 of NREL's Guide to Energy Master Planning of High-Performance Districts and Communities.

How should projected EV market development in our region inform infrastructure planning?

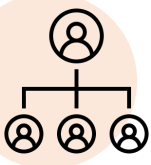


- To estimate charging needs, first explore possible future EV adoption scenarios using SLOPE's Data Viewer. Calculate the % plug-in hybrids and battery EVs.
- Then, use those values to estimate the number of workplace and public Level 2 chargers and public DC fast chargers that will be needed using NREL's EVI-Pro Lite.

What are the key planning documents and policies that affect our EV strategy?



- Consider recommendations for infrastructure planning using the Florida Electric Vehicle Roadmap report.
- Check whether your city has adopted local ordinances or building code amendments that put EV charging in your commercial or residential building code.



Plan and Prepare: Identify human, technical, and financial resource needs and align with equity and resilience goals

Will our plan support our community's equity goals?

- Evaluate EV charging scenarios according to your equity objectives by viewing the Clean Cities Coalition Network's webinar [Using the EZMT to Equitably Plan for EV Charging Stations](#).
- For a customized analysis of equitable EV infrastructure development, contact NREL to explore options for analysis using the [EVI-Equity](#) model.

How can we help local businesses and workers benefit from our EV strategy?

- Plan for a skilled workforce using Chapters 3, 6, and 7 of ETcommunity's [Workforce Projections to Support Battery Electric Vehicle Charging Infrastructure Installation](#).
- Help workers gain necessary skills using DOT's [Intelligent Transportation Systems Professional Capacity Building Program](#).

How can we anticipate potential risks and plan for long-term resilience?

- Consider common types of project risks and strategies for addressing them, described in Phase 0 and Phase 3 of DOE's [Energy Transitions Playbook](#). Enter identified risks into a [Risk Reporting Matrix](#) to help the project team with mitigation planning.

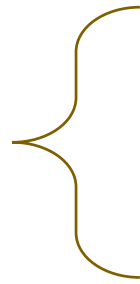
What financial and institutional resources are needed to carry out our plan?

- Create financial projections and risk analyses using NREL's [EVI-FAST](#) for multiple charging infrastructure scenarios.
- Develop financial and business models using Chapter 3 of NREL's [Guide to Energy Master Planning of High-Performance Districts and Communities](#).



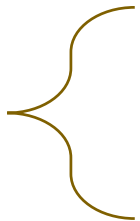
Gather Resources: Finalize budgets, schedules, and partnerships for near-term projects

How do we identify the best funding opportunities for our near-term projects and craft successful applications?



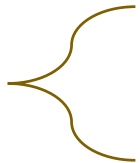
- View the Florida Race to Zero [Webinar](#) for an overview of funding provisions in the Bipartisan Infrastructure Law and how state and local governments and utilities can access these funds.
- Explore federal funding opportunities, including program details, eligibility requirements, and helpful tips, in the Federal Funding Opportunities for Local Decarbonization resource.
- Browse [SAM.gov](#), [Grants.gov](#), and DOT's [EV infrastructure Funding Matrix](#) for comprehensive lists of Federal grants. Also explore the Federal Highway Administration's [Bipartisan Infrastructure Law](#) guidance, which has the fact sheets, funding guidance, regulations, and assistance to help your city navigate new funding opportunities as they become available.

How do we coordinate with other agencies and private sector partners to leverage collective buying power in support of fleet electrification?



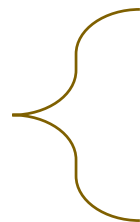
- Promote regional coordination by revisiting Southeast Florida Regional Climate Change Compact's [Electric Vehicles and EV Infrastructure Guide](#).
- Consider pursuing group buys for EVs to lower barriers for individuals and companies using SWEEP's [EV Group Buy Program Handbook](#) and [EV and PV Power Purchase Handbook](#).

What is our long-term plan for financial sustainability?



- Consider ways to sustain funding using Greenlining Institute's report on [Sustaining Clean Mobility Equity Programs](#).

How can we promote regular communication with the project team and establish a transparent reporting process?

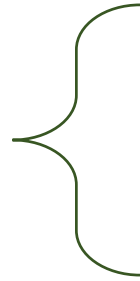


- Use the [Responsible-Accountable-Consulted-Informed Matrix](#) and the [Sponsor Coordination Matrix](#) to assign roles, to plan participation, and to keep track of projects' timelines, funding sources, and funding amounts.
- Follow best practices in community engagement by revisiting Greenlining Institute's [Toolkit](#).



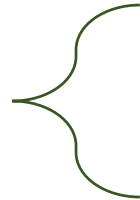
Implement: Issue contracts and permits, mitigate risks, and track and report progress

How can we mitigate potential environmental, social, and safety risks?



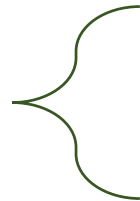
- Explore opportunities to use your transportation plan as a tool for social change using Greenlining Institute's [Investing in Climate Equity: Lessons and Opportunities for Increasing Green Bank Investments in Communities of Color](#) and [Autonomous Vehicle Heaven or Hell: Creating a Transportation Revolution that Benefits All](#).
- Review good international industry practices to preserve environmental quality and occupational and community health and safety using the World Bank Group's [Environmental, Health, and Safety Guidelines](#).

How should we structure a request for proposals and streamline permitting processes?

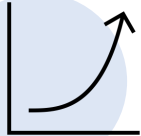


- Use a request for proposals to convey specific expectations and requirements to project developers. NREL's [Guide to Energy Master Planning of High-Performance Districts and Communities](#) describes how to align a request for proposals with the community's vision.

How can we structure performance plans and establish metrics to track and report progress?



- Create an equitable, community-centered transportation plan and establish performance measures by revisiting Greenlining Institute's [Mobility Equity Framework](#).



Maintain and Accelerate: Monitor performance, maintain reliability, and promote success

How can we monitor and verify project performance to compare against our goals?



- Revisit Greenlining Institute's Mobility Equity Framework to establish performance metrics that can be compared against your community's goals.

How can we promote EV charging access and infrastructure at private residences and businesses?



- Review guidance on implementing EV-ready building codes and leveraging public fleets and facilities by revisiting Southeast Florida Regional Climate Change Compact's Electric Vehicles and EV Infrastructure Guide.
- Promote EV charging access and establish education and outreach initiatives using Chapters IV and VI of Electrify the South's Electric Transportation Toolkit.

How can we mitigate potential reliability and resiliency issues with our infrastructure?

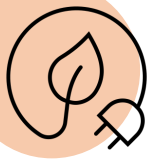


- Learn about condition monitoring and predictive maintenance using Phase 5 of DOE's Energy Transitions Playbook.

What policies can help accelerate electrification while improving health and equity in our community?

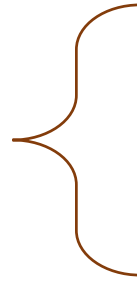


- Explore policy recommendations to accelerate deployment of EVs in SWEEP's Equity, Emissions, & Electric MHDVs.
- Consider an EV group buy program by revisiting SWEEP's EV Group Buy Program Handbook and EV and PV Power Purchase Handbook.
- Consider low- and zero-emissions zones described in Greenlining Institute's Opportunities and Challenges in Designing Equitable Clean Transportation Policies.
- Consider the key transportation policies outlined in SWEEP's Transportation Toolkit.



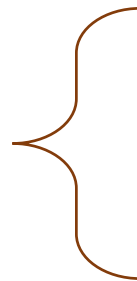
Adapt and Iterate: Strive for continuous learning, growth, innovation, and amplification

How do we future-proof our infrastructure and prepare for emerging technologies?



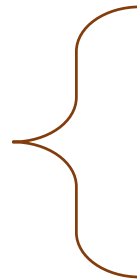
- Plan for grid integration, energy storage, and EV charging infrastructure using the analysis approaches described in Chapter 9 of NREL’s [Guide to Energy Master Planning of High-Performance Districts and Communities](#).
- Consider policy tools and recommendations for local governments to prepare for autonomous vehicles by exploring SWEEP’s [Shared, Electric, and Self-Driving: How states and municipalities can encourage autonomous vehicles to be shared and electric](#) and revisiting [Autonomous Vehicle Heaven or Hell: Creating a Transportation Revolution that Benefits All](#).

How do we support an adaptable local workforce and business community to keep pace with future repair, replacement, growth, and upgrade needs?



- Revisit DOT’s [Intelligent Transportation Systems Professional Capacity Building Program](#) to support transportation professionals in developing their knowledge, skills, and abilities to build technical proficiency.

How do we amplify the impact of early wins and harness momentum to achieve our more ambitious goals?



- To pave the way for future development, ensure that early projects are done right by revisiting NREL’s [Guide to Energy Master Planning of High-Performance Districts and Communities](#) (p. 30).
- Assess the social equity impacts of early projects and communicate the results and lessons learned using Greenlining Institute’s [Making Equity Real in Climate Adaptation and Community Resilience: A Guidebook](#). This can help the project team find opportunities to achieve more ambitious goals and maintain public trust, enthusiasm, and support.