The Transportation Climate Initiative (TCI) is a new collaboration of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the District of Columbia to achieve shared energy, transportation, and climate goals. Working together, these states can enhance their respective capacities to achieve policy objectives beyond their reach as individual jurisdictions. Many federal policy decisions facing the Northeast-Midwest (NEMW) Coalitions may interact with TCI efforts. This Note to the Coalitions provides essential background on TCI’s goals, structure, and activities to help inform those policy decisions.¹

TCI Formation & Purpose

Before forming TCI, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the District of Columbia—and their respective energy, transportation, and environment agencies—each worked alone to reduce greenhouse gas emissions (GHGs) associated with transportation. That meant tackling their over-reliance on high-carbon fuel and challenges with vehicle miles traveled (VMT) as isolated states and agencies despite the regional and multi-sector nature of their transportation network. Despite a lack of coordination, individual state and agency strategies often included similar features, including establishing GHG reduction targets, preparing climate action plans, and incorporating climate protection into long-range transportation plans (Table 2).

Fortunately, Northeast states have a long and successful history of regional problem solving. In particular, the Regional Greenhouse Gas Initiative (RGGI) created and manages a market-based system to reduce GHG emissions from the power sector. Pleased with the RGGI collaboration, the states decided to expand their climate collaboration into the transportation sector. In June of 2010, the executives of the energy, transportation, and environment agencies from these states signed the TCI Agenda for Progress Declaration of Intent.

¹ Much of the TCI information comes from documents available on TCI’s website, hosted by Georgetown Climate Center, at [http://www.georgetownclimate.org/state-action/transportation-and-climate-initiative](http://www.georgetownclimate.org/state-action/transportation-and-climate-initiative). Additional information came from personal correspondence with TCI participants.
TCI’s overarching goal is to reduce GHGs from transportation. Once formed, TCI began pooling resources across jurisdictions and agencies to develop best practices and regional strategies for addressing the interrelated problems. TCI actions build upon state-level strategies already in place while creating new capacity to address problems that are interstate in nature. The interagency strategy behind TCI’s work will create safer and more reliable transportation options that have additional benefits including less congestion, lower transportation costs, reduced energy use, improved air quality, and better public health. TCI may also make the Northeast region more competitive in the clean energy economy by strengthening partnerships and supporting development of advanced technologies.

<table>
<thead>
<tr>
<th>State</th>
<th>% of Energy Use</th>
<th>% of GHGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>31%</td>
<td>43%</td>
</tr>
<tr>
<td>DE</td>
<td>28%</td>
<td>30%</td>
</tr>
<tr>
<td>DC</td>
<td>11%</td>
<td>36%</td>
</tr>
<tr>
<td>ME</td>
<td>29%</td>
<td>46%</td>
</tr>
<tr>
<td>MD</td>
<td>33%</td>
<td>30%</td>
</tr>
<tr>
<td>MA</td>
<td>32%</td>
<td>40%</td>
</tr>
<tr>
<td>NH</td>
<td>35%</td>
<td>33%</td>
</tr>
<tr>
<td>NJ</td>
<td>38%</td>
<td>35%</td>
</tr>
<tr>
<td>NY</td>
<td>29%</td>
<td>34%</td>
</tr>
<tr>
<td>PA</td>
<td>27%</td>
<td>23%</td>
</tr>
<tr>
<td>RI</td>
<td>29%</td>
<td>12%</td>
</tr>
<tr>
<td>VT</td>
<td>34%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**Why the Departments of Transportation, Energy, and Environment?**

These agencies have different but interrelated missions. Transportation uses 30% of the TCI region’s energy and creates about 30% of the region’s GHGs. TCI’s statistics are comparable to those of the entire Northeast-Midwest region, whose transportation sector accounts for 28% of energy use and 30% of GHGs emitted. See Table 1 for state-by-state data.

By reducing transportation demand, the agencies can reduce energy use and GHGs while meeting the transportation departments’ need to reduce congestion and VMT.

---


3 See Appendix: State GHG resources.
<table>
<thead>
<tr>
<th>State</th>
<th>GHG Reduction Target</th>
<th>Climate Action Plan</th>
<th>Long-Range Transportation Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TCI States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>10% below 1990 levels by 2020 80% below 2001 levels by 2050</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>DE</td>
<td>7% below 1990 levels by 2010</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>DC</td>
<td>none</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>ME</td>
<td>1990 levels by 2010 10% below 1990 by 2020 up to 75% as necessary over long-term</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MD</td>
<td>25% below 2006 levels by 2020</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MA</td>
<td>10-25% below 1990 levels by 2020 80% below 1990 levels by 2050</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>NH</td>
<td>1990 levels by 2020 10% below 1990 by 2020 75-85% below 2001 levels over long-term</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>NJ</td>
<td>1990 levels by 2020 80% below 2006 by 2050</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>NY</td>
<td>5% below 1990 by 2010 10% below 1990 by 2020 80% below 1990 by 2050</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>PA</td>
<td>30% below 2000 levels by 2020</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>RI</td>
<td>1990 levels by 2010 10% below 1990 by 2020 75-85% below 2001 levels over long-term</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>VT</td>
<td>25% below 1990 by 2012 50% below 1990 by 2028 75% below 1990 by 2050, if practical</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Other NEMW States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL</td>
<td>1990 levels by 2020 60% below 1990 levels by 2050</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IN</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>IA</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MI</td>
<td>20% below 2005 levels by 2025 80% below 2005 levels by 2050</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>MN</td>
<td>15% below 2005 levels by 2015 30% below 2005 levels by 2025 80% below 2005 levels by 2050</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>OH</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>WI</td>
<td>2005 levels by 2014 22% below 2005 by 2022 75% below 2005 by 2050</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

4 See Appendix: State GHG resources.
Institutional Structure & Participant Roles

The agency heads of the states’ energy, transportation, and environment departments lead TCI, direct TCI’s work, and approve all commitments by the agencies or relating to funding.

A Staff Steering Committee oversees TCI’s daily activities under the agency heads’ executive direction. The chairs of the Steering Committee are from New York’s Department of Environmental Conservation, Delaware’s Department of Transportation, and Vermont’s Agency of Transportation. The Steering Committee holds weekly calls that are open to any member agency.

Figure 1: TCI Organizational Structure

Under the direction of the Staff Steering Committee is a Staff Working Group made up of one or more representatives from each agency in each state. The Staff Working Group makes governance decisions and provides input on the development of projects.

In addition to the Staff Working Group’s four topical workgroups (discussed below), TCI also has a funding workgroup, communications team, and facilitator. The communications team handles stakeholder consultations, branding, and external and internal communications. The Georgetown University’s Climate Center facilitates and coordinates TCI’s work and serves as TCI’s point of contact.
The four topical workgroups address different approaches to reducing transportation GHGs: Alternative Fuels and Vehicles, Sustainable Communities, Innovative Communication Technologies, and Freight Efficiency. State agency staff lead the workgroups, which are open to any member agency.

*Developing Clean Vehicles and Alternative Fuels*

The Alternative Fuels and Vehicles Workgroup supports the deployment of low-carbon fuels and vehicles by creating incentives for their manufacture and purchase and addressing existing regulatory obstacles. The workgroup chairs are from the New York State Energy Research and Development Authority, Maryland Department of the Environment, and Massachusetts Office of Energy and Environmental Affairs.

*Creating Sustainable Communities*

The Sustainable Communities Workgroup catalogs and analyzes existing state policies that support sustainable communities. The group looks at removing obstacles to developing housing and jobs near affordable, safe, and reliable transportation options. By allowing development around current infrastructure, they hope to preserve natural space while revitalizing existing communities.

This group investigates and develops policies that measure outcomes, leverage existing federal and state funding, and implement innovative planning strategies like scenario planning. After the workgroup catalogues the existing policies, they will convene larger workshops to identify opportunities for collaboration. The Sustainable Communities Workgroup chair is from the New Jersey Department of Environmental Protection.

*Adopting Innovative Communication Technologies*

The Innovative Communication Technologies Workgroup uses social media to improve the accuracy of transportation planning, promote the use of public transit, and help the transportation system to operate more efficiently. TCI hopes these tools will reduce travel congestion, provide real-time travel options, reduce costs of owning a vehicle, and improve safety. The workgroup is seeking public input to ensure it can meet the needs of all parts of the TCI region and of people of any socioeconomic status, whether they live in rural,

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5 TCI's use of the term “sustainable communities” refers to a community's ability to provide for and sustain the environmental, economic, and social wellbeing of current and future residents; to promote equity while maintaining the unique character of neighborhoods; and to integrate energy use considerations into development decisions.
suburban, or urban communities. The Innovative Communication Technologies Workgroup chair is from the New York Department of Transportation.

**Advancing More Efficient Freight Movement**

The Freight Efficiency Workgroup seeks freight policies that promote economic growth, improve communities, and increase efficiency. For example, if this workgroup develops policies to increase efficiency by moving more goods by water, they could also help revitalize port communities. The workgroup might also develop a web-based inventory system to help haulers notify shippers when they have space available for additional cargo. The Freight Efficiency Workgroup chair is from the Delaware Department of Transportation.

**TCI Funding & Support**

Each state provides in-kind resources and employees to staff the workgroups and steering committee. The Georgetown Climate Center and several foundations provide additional staffing and funding.

TCI also seeks support for specific “anchor” projects through various federal grant programs. The first of these anchor projects to receive federal funding is the Northeast Electric Vehicle Network, formed in October 2011. On behalf of TCI, New York’s State Energy Research and Development Authority received the $994,500 Electric Vehicle Readiness Grant from the U.S. Department of Energy’s Energy Efficiency and Renewable Energy Office’s Clean Cities Initiative. The grant funds the development of standards and guidelines for selecting sites, permitting, and installing EV charging stations.

Following a June 2011 Agreement to Support Sustainable Communities, TCI submitted a proposal to the U.S. Environmental Protection Agency’s Office of Research and Development to develop a region-specific modeling tool for evaluating the effects of development decisions. The tool would have formed the basis for creating regional centers to pool the region’s expertise and provide technical assistance for the benefit of small communities, but EPA declined to fund the project.

**TCI Work Plan**

TCI’s work plan guides them through the end of 2013. By then, they will have developed a common understanding of the role transportation plays in job creation, economic development, housing, public health, and GHGs. The work plan contains the following
elements for each workgroup: learning and inquiry; policy development; anchor projects; federal partnerships, policy, and legislation; municipal and state partners and empowerment; and communications. Table 3 describes each element and provides an example of the Alternative Fuels and Vehicles Workgroup activities in that area.

### Table 3: TCI’s Work Plan Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Example (Alternative Fuels &amp; Vehicles Workgroup)</th>
</tr>
</thead>
</table>
| Learning & Inquiry | ● Develop performance metrics, collect data, measure baselines  
● Identify research needs | Measure impact of EV on regional electric grid and research mitigation |
| Policy Development | ● Evaluate relative effectiveness of policies  
● Draft model programs | Evaluate affect of EV on states’ gas tax income and develop alternate funding sources |
| Anchor Projects | ● Develop project selection criteria and scopes of work  
● Secure funds and implement | Northeast Electric Vehicle Network |
| Federal Partnerships, Policy, & Legislation | ● Seek research and funding partners at U.S. EPA, DOT, DOE, and HUD  
● Track relevant policy and legislative developments | Electric Vehicle Readiness Grant from U.S. Department of Energy |
| Municipal & State Partners & Empowerment | ● Train officials to consider transportation, energy, and emissions in decision-making  
● Share best practices  
● Seek input and feedback | Help streamline and standardize regulatory processes so each prospective charging station faces a predictable permitting process |
| Communications | ● Engage stakeholders and partners in private and public sectors | Convene stakeholder meetings to facilitate discussions between the private and public sectors |

### TCI Outcomes to Date

Even though it is very new, TCI is already producing products and on-the-ground results (Table 4). In particular, the Alternative Fuels and Vehicles Workgroup and its private and public partners established the Northeast Electric Vehicle (EV) Network. Several states had begun to develop EV infrastructure individually, but the lack of standardization created an obstacle to drivers crossing state borders. This EV Network will standardize EV infrastructure across the region based on lessons learned from the existing state-level programs. The EV Network will enable drivers of electric vehicles who travel throughout the region to find standardized, reliable charging stations even when far from home. The EV Network illustrates the kinds of results that policymakers can expect to see over time from other TCI efforts.
### Table 4: TCI Products & Accomplishments

<table>
<thead>
<tr>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>• June: Declaration of Intent creates TCI</td>
<td>• June: Agreement to Support Sustainable Communities</td>
</tr>
<tr>
<td>• Background Research Papers:</td>
<td>• October: Agreement to Develop a Northeast Electric Vehicle Network &amp; Promote Alternative Transportation Fuels</td>
</tr>
<tr>
<td>o Overview of RGGI</td>
<td></td>
</tr>
<tr>
<td>o Summary of Policy Options in State Climate Action Plans</td>
<td></td>
</tr>
<tr>
<td>o Climate Change Provisions in State Long-Range Transportation Plans</td>
<td></td>
</tr>
<tr>
<td>• October: Strategic 3-Year Work Plan</td>
<td>• December: Sustainable Communities Workshop on Performance Measures</td>
</tr>
<tr>
<td></td>
<td>• December: First stakeholder meeting of EV Network</td>
</tr>
</tbody>
</table>

### Overview of Federal Implications

Federal agencies face many of the same problems that TCI aims to solve for state agencies. For example, states and the federal government share the need to maintain transportation funding levels as gas tax revenues decline due to increases in fuel efficiency. TCI-crafted solutions may therefore provide a strong starting point for federal agencies in the Northeast and could offer insights for nationwide policies.

Federal actions could also help or hinder TCI’s efforts. Clearly, federal grant programs could play an important role in assisting TCI work. It is also critical, however, that federal policy decisions not inadvertently conflict with or constrain the proactive state-led regional efforts of TCI to solve transportation and climate-related problems. Transportation reauthorization and federal energy policies will certainly affect TCI’s efforts and similar efforts nationwide, as will decisions made during the appropriations process. Policymakers should consider the implications for TCI’s work when evaluating legislative proposals that affect alternative fuels and vehicles, sustainable communities, communications technologies, or freight movement.

### Conclusion

The proactive, regional collaboration of the 11 TCI states gives federal decision makers an important opportunity to design national policy and programs to reduce greenhouse gas emissions from the transportation sector. Such national policies would effectively promote clean vehicles and alternative fuels, sustainable communities, innovative communication technologies, and efficient movement of freight. By integrating the efforts of state energy, transportation, and environmental agencies, TCI is also creating a framework to achieve ancillary objectives of improving air quality and public health while reducing congestion, transportation costs, and energy use.
It is also important to consider that TCI’s support for interstate partnerships, markets, and advancement of technologies could propel the Northeast region into a more competitive position in the global clean energy economy. As a case in point, the creation of regional, standardized EV infrastructure (the EV Network) will give related businesses a predictable regulatory market throughout the entire TCI region.

Prepared by Beth Zgoda, Policy Analyst, Northeast-Midwest Institute, bzgoda@nemw.org.
Appendix: State GHG Resources

Connecticut

Delaware

District of Columbia

Illinois

Indiana

Iowa

Maine

Maryland

Massachusetts

Michigan

**Minnesota**

**New Hampshire**

**New Jersey**

**New York**

**Ohio**

**Pennsylvania**

**Rhode Island**

**Vermont**

**Wisconsin**