

## Why Deployment Communities?

### 01 WHAT

The Promoting Electric Vehicles Act of 2011 would advance the wide-scale deployment of grid-enabled vehicles (GEVs) and related infrastructure needed to support them.

### 02 HOW

The bill would create a targeted investment framework to leverage constrained federal resources to ensure large-scale deployment of GEVs into a limited number of specific geographic regions—“deployment communities.” The primary tools are grants to communities that can be used for a wide range of initiatives to promote GEV adoption, including vehicle incentives for consumers and infrastructure providers. The bill focuses on a three-year initial deployment program with an evaluative process laying the groundwork for broad scale adoption of GEVs. In contrast to small pilot deployments, this approach would place the nation on a trajectory to ensure that half of all miles travelled in light-duty vehicles by 2030 and 75 percent of miles travelled by 2040 are electric miles, reducing the oil consumed by the light-duty fleet by more than 6 million barrels per day.

### 03 WHY

These initial focuses on localized electric transportation would accomplish three main goals:

- *Demonstrate Proof of Concept for American Consumers:* Deployment communities would show the value of a fully operational, smart, integrated electrified transportation system, helping to guarantee that these vehicles are accepted—and indeed coveted—not just by early adopters, but by typical families who will see their economic value.
- *Facilitate Learning by Doing:* Deployment communities will serve as labs, showing what works well and what could work better, so we can learn as electrification expands nationwide.
- *Maximizing Investment Payoff:* Deployment communities will provide the crucial economies of scale that are necessary to continue to reduce the price of electric vehicle components and charging infrastructure.

The bill reflects the fact that small pilot programs are too limited to make any meaningful headway toward these goals. Only an aggressive and scaled approach centered on a limited number of deployment communities will determine how consumers will use GEVs, what charging patterns will look like, what GEV-related business models

will be viable, and which technological platforms work best for consumers, all while driving battery costs down and clearing a path to successful national adoption. The bill recognizes that a widespread national rollout without careful planning will reduce the likelihood that GEVs can penetrate the mass market, instead being relegated to niche market status. Regional scale deployment will:

- provide the experience to understand how much public charging is needed to support GEVs;
- help identify economically sustainable business models for the installation and operation of public charging infrastructure; and,
- help identify and resolve regulatory issues.

#### 04 WHERE

Rather than picking deployment communities in the legislation, the bill sets up a "race-to-the-top" style competition, with communities to be selected by the Department of Energy. Winning bids would be those that meet a list of criteria established in the law, including demonstrating a deep commitment to a successful deployment of GEVs by a wide range of public and private stakeholders; a supportive utility regulatory environment; a streamlined process for permitting charger installation; and a clear framework for dealing with third-party power providers. In short, it would identify those communities in which all of these pieces have been brought together—autos, infrastructure, favorable regulatory environment, interested consumers—to ensure that large scale deployment of GEVs has the best chance of success.