

9 Conclusions

The 2016 CEP sets forth an energy vision that requires rapid changes in transportation energy use patterns relative to trends in the recent past. This includes reducing total transportation energy use by 20% from 2015 levels and reducing GHG emissions by 30% from 1990 levels by 2025. Achieving this ambitious vision will require a combination of reducing VMT and reducing the energy used – and GHGs emitted – per mile traveled. Reducing VMT can be achieved by increasing vehicle occupancy and by shifting passenger vehicle trips to rail, transit, walking, and biking trips. Reducing energy use per mile traveled can be achieved by increasing the fuel economy of the vehicle fleet. Increasing vehicle electrification is one important avenue for improving fuel economy and reducing GHG intensity per mile traveled. PEVs offer significant energy and GHG savings relative to ICEV vehicles and are available in an increasing range of vehicle body types, electric ranges, and price points. The CEP provides targets related to many of these strategies. To date, however, the State is lagging behind the rate of change required to achieve each of the targets evaluated in this Profile.

Current progress toward the CEP targets suggests that additional policy initiatives may be needed. As laid out in the CEP, a variety of policy tools are available to accelerate progress toward these targets. These tools include strategic investments in needed infrastructure (e.g. supporting the deployment of PEV charging facilities and road infrastructure that supports safe walking and biking), public outreach/information sharing (e.g. the *GoVermont* program, partnerships with *Drive Electric Vermont*, the *Vermont Clean Cities Coalition*, and other groups), regulatory mechanisms (e.g. development standards that support smart growth), and market mechanisms (e.g. PEV purchase rebates). Given the rapid changes envisioned in the CEP, policy changes that would promote behavior change in the near-term may be highly desirable.

Two areas of additional research may be helpful in this process. The first area of research is to evaluate the efficacy of each of the nine supporting objectives toward achieving the three overarching transportation goals (e.g. what are the relative impacts of increasing transit ridership and increasing PEV registration on total energy use?). The second area of research is to determine what policy levers can be used to achieve these objectives most effectively (e.g. are vehicle pricing incentives or improved charging infrastructure more effective at increasing PEV sales?). Greater understanding of these issues can support more effective strategies for achieving CEP targets.

