

This document has been prepared as part of the implementation project of Legal Pathways to Deep Decarbonization (Michael B. Gerrard and John C. Dernbach, eds. Environmental Law Institute [2019]) (LPDD). For background information on the project, see <https://lpdd.org>

Memorandum in Support of Model Municipal Ordinance for AFV Parking Benefits

In the United States, the transportation sector accounts for 28 percent of the total energy consumed, 72 percent of petroleum usage, and about a third of greenhouse gas emissions.¹ Cars and trucks use about half of the total energy consumed by the transportation sector, which also includes non-road transport such as trains, subways, planes, ships, and other water craft.

A goal of the Deep Decarbonization Pathways Project is to shift 80 percent to 95 percent of the miles driven from gasoline to lower carbon energy sources like electricity and hydrogen.² Meeting this goal will require increased fuel economy standards in excess of 100 miles per gallon for light duty vehicles, such as cars and sport utility vehicles, and the deployment of approximately 300 million alternative fuel vehicles ("AFVs"), specifically the following three types of AFVs: hydrogen fuel cell vehicles ("HFCVs"), battery electric vehicles ("BEVs"), and plug-in hybrid vehicles("PHEVs").

One pathway is for federal, state, and local governments to encourage the purchase and use of AFVs by providing parking benefits to drivers of AFVs.³ The model parking benefits ordinance set forth below is designed to incentivize the purchase and use of AFVs.

These incentives extend only through December 31, 2030. It would be impractical to offer every new light duty vehicle purchased after 2030 free parking and free parking would be an unnecessary incentive if only AFVs were sold. In any event, it is prudent to reevaluate incentives for AFVs in a decade – or sooner if AFV adoption rates are significant.

¹ U.S. Energy Information Agency: Annual Energy Review: 2011 (2012). Available at: <http://www.eia.gov/totalenergy/data/annual/> (accessed:June 10, 2016). See, also, <http://www.eia.gov/todayinenergy/detail.php?id=29612>.

² Michael Gerrard and John Dernbach, *Legal Pathways to Deep Decarbonization in the United States* (Environmental Law Institute, 2018), Ch. 14, at 353. See also, Chris Gearhart, *Implications of Sustainability for United States Light-Duty Transportation Sector*, 3 MRS Energy & Sustainability 1, 7, note 6 (2016)

³ *I.d.* at 360.