



## Climate Legislation and the Transportation Sector: Revenue Implications

September 23, 2009

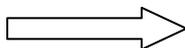
### *How will climate legislation affect the price of gasoline?*

H.R. 2454, the “American Clean Energy and Security Act” (ACES) and forthcoming Senate legislation will generate significant revenue from the sale of emissions allowances related to fuel consumption in the transportation sector. Both refiners and importers of petroleum will be required under a cap-and-trade program to submit emission allowances annually to the Environmental Protection Agency (EPA) in an amount equivalent to the carbon content of the petroleum they refine or distribute. According to the EPA projections, this requirement will result in modest increases in the retail price of fuels used by the transportation sector.

**Fig. 1**



Oil refiners and importers required to purchase and then submit emission allowances to EPA



EPA estimates that the price of gasoline **increases** 2-3 cents/gallon annually as a result of ACES between 2012 and 2050

Source: EPA ADAGE model, Scenario 2, H.R. 2454, Data Annex, pg. 60.

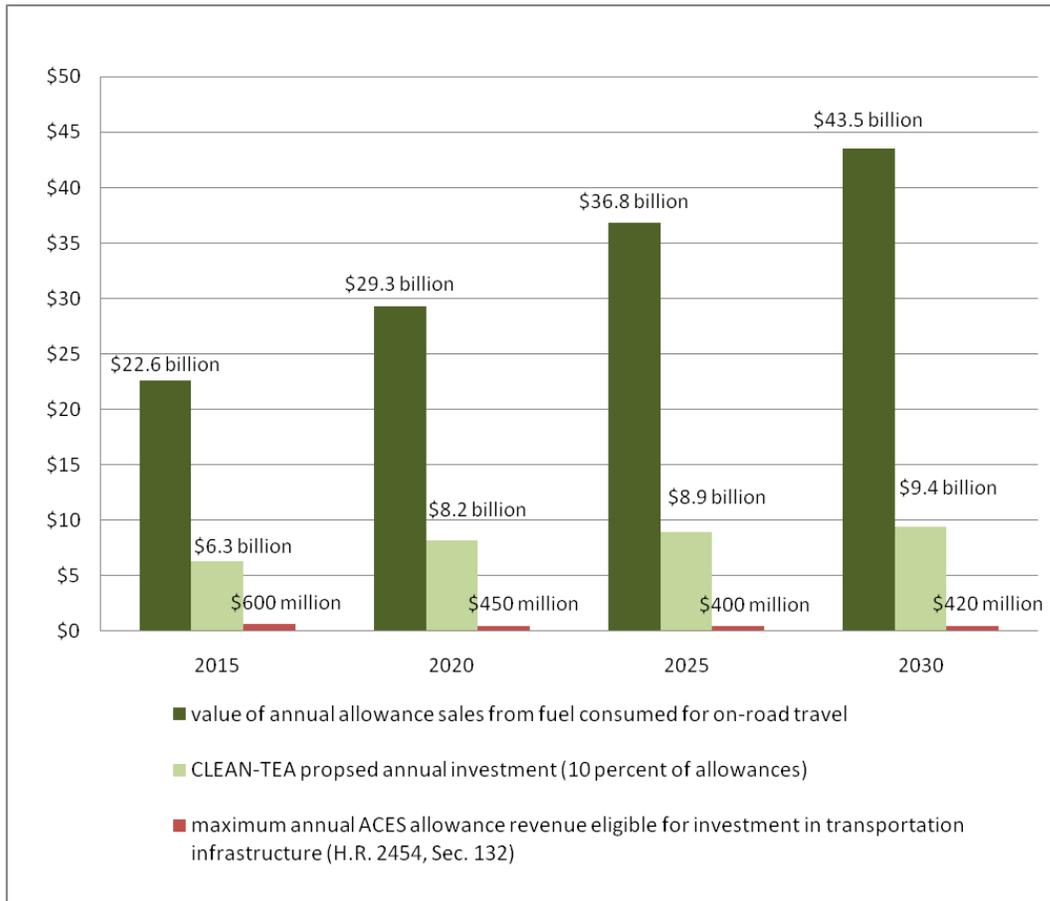
[http://www.epa.gov/climatechange/economics/pdfs/HR2454\\_Analysis\\_Appendix.pdf](http://www.epa.gov/climatechange/economics/pdfs/HR2454_Analysis_Appendix.pdf)

### *How much revenue will the sale of emission allowances for transportation fuel generate?*

EPA modeling shows that the price of gasoline will increase by slightly more than 3 cents per gallon annually between 2012 and 2015 as a result of the ACES cap-and-trade program, but the rate of growth will then slow to less than 2 cents per gallon annually in later years. These price changes will have very modest impacts on individual consumers compared to the rapid increase in the price of petroleum-based fuel in 2008, but the total value of emission sales within the transportation sector is quite substantial. **According to EPA and FHWA projections, the sale of emission allowances from fuel consumed for road and highway use alone will generate more than \$22 billion annually by 2015.**<sup>1</sup> Additional revenue will be generated by the sale of emission allowances for fuel consumption by railroads and commercial aviation.

<sup>1</sup> Revenue estimates are calculated by multiplying the predicted emission allowance price for a given year (EPA ADAGE model, Scenario 2, H.R. 2454, Data Annex, pg.60, see link above) by a projected amount of on-road fuel consumption for the same year. Fuel consumption levels were determined by comparing FHWA estimate of annual on-road fuel consumption in 2006, 176.465 billion gallons of refined fuel (*Highway Statistics 2007*, Table MF-27)

**Fig. 2 - Emissions allowance sales from on-road fuel consumption compared to proposed levels of transportation investment in climate legislation**



Sources: EPA ADAGE model, Scenario 2, H.R. 2454 and FHWA Highway Statistics 2007. See footnote for explanation of methodology.

***How does the sale of emission allowances within the transportation sector compare to proposed transportation investments in climate legislation?***

Despite the significant revenue generated by emission allowance sales related to transportation fuels, the Waxman-Markey bill would, at best, provide less than \$600 million annually for investment in transit, pedestrian and bicycle infrastructure and other activities that reduce transportation-related emissions. In fact, because transportation investment would be only an eligible activity under Sec. 132 of the House-passed bill, it is likely that many states and regions would offer zero funding for transportation improvements. A modest 10 percent allocation of emission allowances for transportation investment envisioned by S. 575, the CLEAN-TEA legislation, would still be considerably smaller than the allowance revenue generated from on-road petroleum consumption.

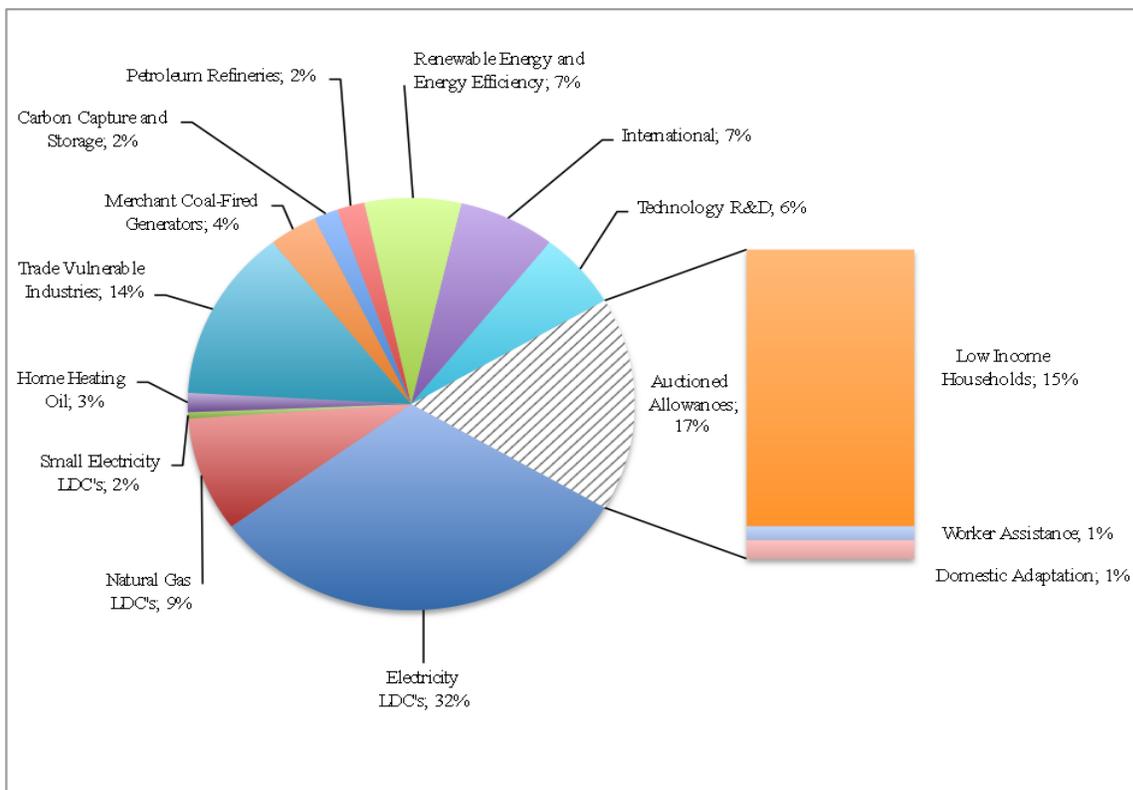
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and adjusting them to correspond with economy-wide reductions in petroleum consumption identified in the ADAGE Scenario 2 model.

### ***Where are emission allowances being invested in the Waxman-Markey/ACES bill?***

While the transportation sector is responsible for approximately 28 percent of U.S. greenhouse gas emissions, **less than one percent** of emissions allowances in the House-passed bill are made available for improvements in transportation infrastructure and operations that reduce emissions (Sec. 132). Emission allowances are instead provided free or auctioned for a wide range of purposes such as rebates for low and moderate income families, technology investments, and the support of trade-exposed industries. Local electricity distribution companies receive the largest share of allowances with the stipulation that the value of the allowances must be used to offset increased energy prices. **From a transportation perspective, it is important to recognize that the billions of dollars generated by the sale of emission allowances from transportation fuels will not be used to reduce transportation-related emissions or to improve our nation's transportation system.** Under the current version of ACES, these allowance sales will be used to support consumers and companies in every other sector of our economy.

**Fig. 3 - Distribution of ACES Allowances in 2016**



For additional information on climate change issues and public transportation, please contact Homer Carlisle of APTA's Government Affairs Department at (202) 496-4810 or email [hcarlisle@apta.com](mailto:hcarlisle@apta.com).