Department of Environmental Quality

Low Carbon Fuel Advisory Committee

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Setting the Baseline Standard

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Setting the Baseline for the LCFS

Importance of the Baseline Determination:

- Ensure that the Low Carbon Fuel Standard program meets its 2020 carbon intensity goal
- Provide the basis for setting standard in future years

Setting the Baseline for the LCFS

Questions for discussion:

- What data do we use to calculate the baseline?
- How do we estimate the 2010 fuel mix?
- Which fuels will be included in the baseline calculation?
- Should there be one or two baselines?

Setting the Baseline for the LCFS

What data do we use to calculate the 2010 baseline carbon intensity? How do we estimate the 2010 fuel mix?

- Data availability: 2007 is most recent complete data available
- Base petroleum mix from 2007
- Mandated biofuels content for 2010
  - Premium gasoline biofuels content
  - Statewide percentage of biodiesel

Setting the Baseline for the LCFS

Which fuels should be included in calculating the baseline?

- DEQ proposes to include gasoline, diesel and fuels that are mandated to be blended with gasoline and diesel
- DEQ proposes not to include electricity, CNG, LNG, hydrogen AND biofuels above the amounts required by the Oregon renewable fuel standard

Setting the Baseline for the LCFS

Should there be one or two baselines?

- Option A: One baseline standard, using carbon intensity of a weighted average of gasoline and diesel and including blended ethanol and biodiesel
- Option B: Two baseline standards, one for gasoline and one for diesel, each including blended biofuels as applicable

Setting the Baseline for the LCFS

Oregon Draft Baseline Carbon Intensities:

- Unblended gasoline = 91.75 g CO_2E/MJ
- Unblended diesel = 92.43 g CO_2E/MJ

Source: TIAX, 1/19/2010 Washington Department of Ecology workshop

Setting the Baseline for the LCFS

Concerns related to one vs. two baselines:

- Separate baselines for gasoline and diesel could ensure that innovations happen in both fuel types
- A single baseline could give regulated parties more flexibility and possibly lower costs, with the ability to weight compliance toward less expensive options
- In the long-term, a single standard could encourage fuel switching, leading to increase in diesel co-pollutants

Setting the Baseline for the LCFS

Questions for Committee:

- Benefits/drawbacks of establishing one baseline?
- Benefits/drawbacks of establishing two baselines?
- Unintended consequences of either approach?