



Low Carbon Fuel Advisory Committee
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Low Carbon Fuel Standard
Covered Fuels and
Regulated/Opt-in

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**Covered Fuels:
Advisory Committee Questions**

- Which fuels should be covered?
- Which fuels should be regulated or opt-in?
- What are the unintended consequences?



Which fuels should be covered?

Fuels used for transportation:

- Gasoline
- Diesel
- Ethanol
- Biomass-based diesel (biodiesel, renewable diesel)
- Liquefied natural gas (LNG)
- Compressed natural gas (CNG)
- Electricity
- Hydrogen
- Other

Slide 3



Which fuels should be covered?

Not covered:

- Propane (Liquefied Petroleum Gas = LPG)

Slide 4



Which fuels should be regulated or opt-in?

- Carbon intensity of the fuel compared to the 2020 low carbon fuel standard
- Gasoline average carbon intensity in Washington is **93 gCO₂e/MJ (draft)**
- A 10% carbon intensity reduction by 2020 would mean the standard in 2020 would be **83.7 gCO₂e/MJ**

Slide 5



Which fuels meet this draft 2020 standard of 83.7 gCO₂e/MJ?

Fuel		Carbon intensity
Gasoline		93.0
North American natural gas via pipeline		67.7
Electricity		41.4
Ethanol	Midwest dry mill, dry DGS, NG	98.4
	Midwest dry mill, dry DGS, 80% NG, 20% Biomass	86.8
	California dry mill, wet DGS, 80% NG, 20% Biomass	77.0
	Brazilian sugarcane	58.0

Slide 6



Option A (similar to California)

Regulated fuels:

- Gasoline
- Diesel
- Ethanol
- Biomass-based diesel
- LNG from fossil sources
- CNG from non-N. American sources

Opt-in fuels:

- Electricity
- LNG from biogas
- CNG from N. American sources and biogas
- Hydrogen

Slide 7



Option B (All fuels regulated)

Regulated fuels:

- All fuels used for transportation

Slide 8



Option C

- | Regulated fuels: | Opt-out fuels: | Opt-in fuels: |
|--|--|--|
| <ul style="list-style-type: none">– Gasoline– Diesel– LNG from fossil sources– CNG from non-N. American sources | <ul style="list-style-type: none">– Ethanol– Biomass-based diesel | <ul style="list-style-type: none">– Electricity– LNG from biogas– CNG from N. American sources and biogas– Hydrogen |

Slide 9



Discussion

- Minimizing compliance burden
- What are potential unintended consequences of options?

Slide 10