



Department of Environmental Quality

Low Carbon Fuel Advisory Committee
Jan 27, 2009

**Low Carbon Fuel Standard
Regulated or Opt-In Party**

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Department of Environmental Quality

**Low Carbon Fuel Standard: Regulated
and Opt-In Entities**

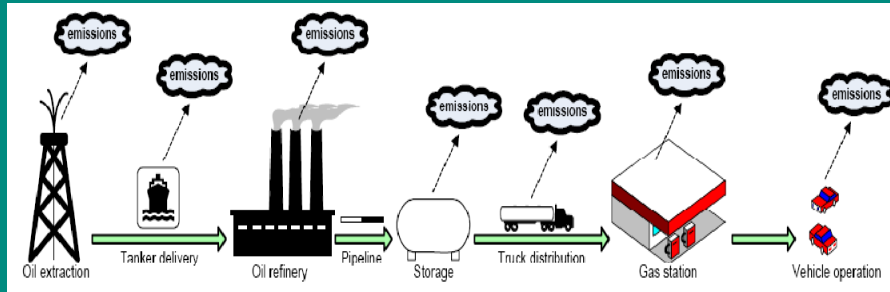
Purpose:

- Which entity would actually be regulated or opt-in to sell credits?

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Low Carbon Fuel Standard: Regulated and Opt-In Entities



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Regulated or Opt-In Entity

Fuels

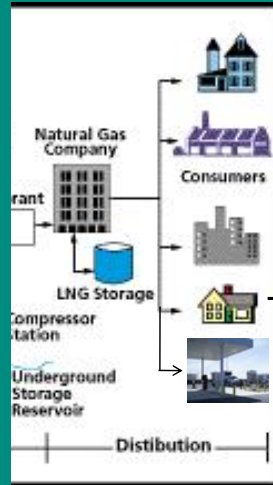
- Compressed Natural Gas (CNG) Fossil
 - Biogas (CNG or LNG)
 - Liquefied Natural Gas (LNG) Fossil
 - Hydrogen
 - Gasoline, Diesel and Biodiesel
- **How fuel gets to user**
 - **Who uses it currently in Oregon**
 - **Proposed regulated/opt-in entity**

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Compressed Natural Gas (fossil)

- Approx. 1,500 CNG vehicles in OR (EIA 2007)
 - Light Duty (passenger car)
 - Heavy Duty (buses, etc.)



Source: EIA.
http://tonto.eia.doe.gov/kids/energy.cfm?page=natural_gas_home-basics

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Compressed Natural Gas (fossil): Fuel

- Three natural gas companies (own majority of fueling stations)
- Ten CNG fueling stations in OR
 - Eight are private/govt. only
 - Two sell fuel to public
- There are home refueling units



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Compressed Natural Gas (fossil)

Regulated or Opt-In?

- Opt-In: N. American Sources
- Regulated: Other Sources

Proposed Opt-In/Regulated Entities:

- Whoever owns the fuel dispensing equipment

Who is this in Oregon?

- Three natural gas companies
- Fleets large enough to own fuel dispensing equipment

Transfer: if seller and buyer agree

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Liquefied Natural Gas (fossil)

- Not currently used in Oregon
- Used in CA as a transportation fuel for heavy duty
- Approx 27 fueling stations in CA



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Liquefied Natural Gas (fossil)

Regulated or Opt-In?

- Regulated

Proposed Regulated Entities:

- Whoever owns the fuel dispensing equipment

Who is this in Oregon?

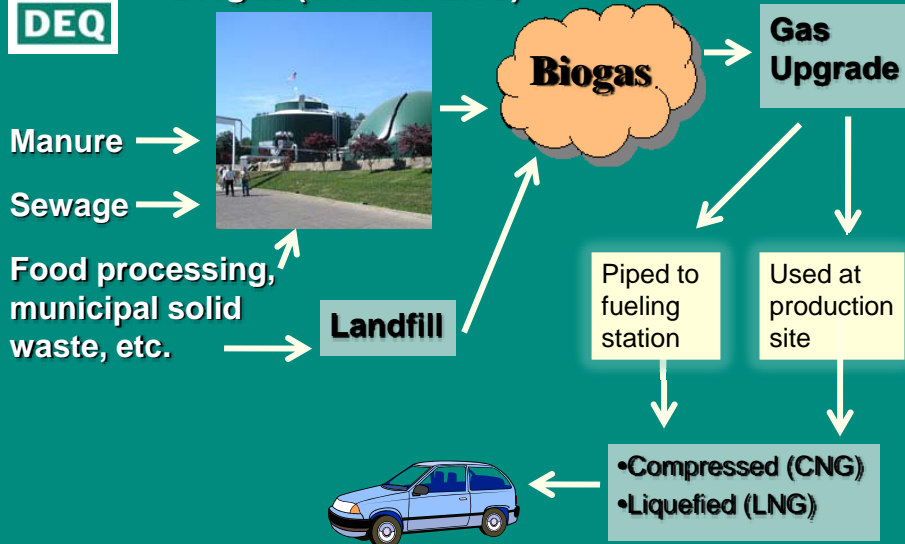
- None known

Transfer: if seller and buyer agree

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Biogas (CNG or LNG)



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Biogas (CNG or LNG)

Regulated or Opt-In?

- Opt-In

Proposed Opt-In Entities:

- Whoever owns the fuel dispensing equipment

Who is this in Oregon? (potential)

Biogas facilities in Oregon	
Source	No. of Facilities
Landfill	6
Wastewater	9
Agriculture	3

Transfer: if seller and buyer agree

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Hydrogen

Hydrogen fuel use:

- Pure hydrogen gas
- “Fuel reformer” on board the vehicle that converts fuels such as methanol, natural gas, or gasoline
 - Internal combustion engine
 - Fuel cell vehicles

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Hydrogen

Regulated or Opt-In?

- Opt-In

Proposed Opt-In Entity:

- Entity who owns the fuel when the finished fuel is made or imported into Oregon

Who is this in Oregon?

- None known

Transfer: if seller and buyer agree

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Summary of Regulated/Opt-In Parties

Fuel	Regulated or Opt-In?	Regulated Party
CNG (fossil)	Opt in: N. American Regulated: other sources	Owner of fuel dispensing equipment in Oregon
LNG (fossil)	Regulated	Owner of fuel dispensing equipment in Oregon
Biogas CNG Biogas LNG	Opt-in	Owner of fuel dispensing equipment in Oregon
Hydrogen	Opt-in	Owner of fuel when finished fuel is made or imported into Oregon

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Gasoline, Diesel, Biofuels: OPTION A

Regulated or Opt-In?

- Regulated

Proposed Opt-In/Regulated Entities:

- Oregon producer or Oregon importer of fuel or feedstock

Who is this in Oregon?

- Terminals and fuel distributors who import fuel
- Biofuel producers

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Gasoline, Diesel, Biofuels OPTION A

Fuel Transfers

- Regulated party status means that person is responsible for credits and deficits from fuel
- Allows for flexibility
- If the regulated party status transfers, the person who sold the fuel no longer has either credits or deficits from that fuel

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Gasoline, Diesel, Biofuels OPTION A

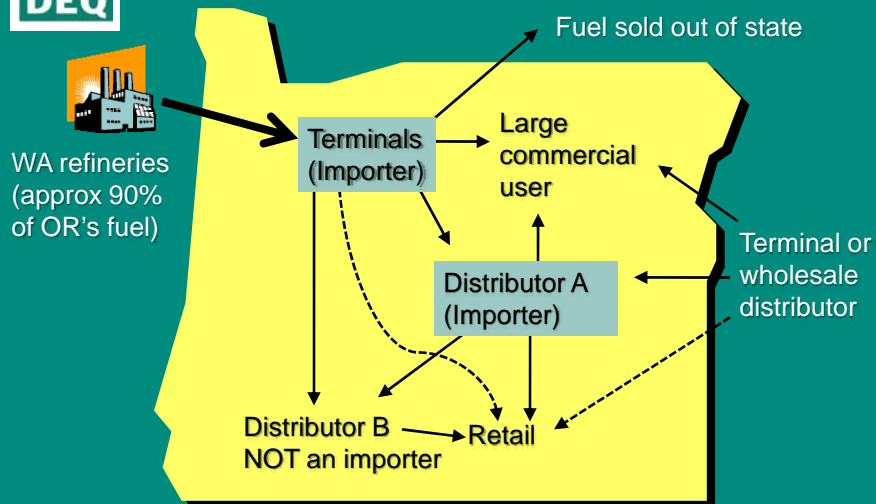
Transfer:

- **Fuel sold to another producer or importer**
 - Regulated party status automatically transfers with sale of fuel
 - Seller of fuel can retain regulated party status for that fuel (and resulting credits/deficits) if they choose
- **Fuel sold to distributor who does not import**
 - Regulated party status does NOT transfer automatically
 - If buyer and seller agree, the regulated party status could transfer

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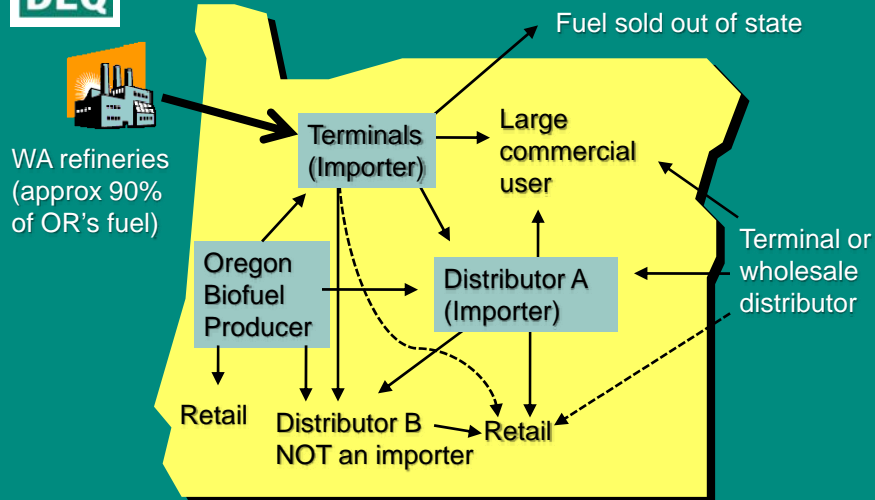
Gasoline, Diesel, Biofuels OPTION A



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Oregon Biofuel Producers OPTION A



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Gasoline, Diesel, Biofuels OPTION B (Based on ODOT fuel tax payers)

Gasoline

- **Licensed Motor Vehicle Fuel Dealer (gasoline)**
 - 155 in Oregon – terminals, bulk plants, distributors

Diesel

- **Licensed "Use" Fuel Seller (diesel)**
 - 750 in Oregon - retail
- **Licensed "Use" Fuel User (diesel)**
 - 1320 in Oregon – fuel users

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Gasoline, Diesel, Biofuels OPTION B

Regulated or Opt-In?

- Regulated

Proposed Opt-In/Regulated Entities:

- Oregon producer of the fuel or blendstock

Or

- An Oregon producer or importer of the fuel or blendstock who is also a:
 - Licensed motor vehicle fuel dealer
 - Licensed use fuel seller
 - Licensed use fuel user

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Gasoline, Diesel, Biofuels OPTION B

Proposed transfer of compliance obligation:

- Compliance obligation transfers automatically through the “first sale” if fuel is sold to another producer or Oregon importer who is a licensed dealer, seller or user
 - Similar to ODOT’s tax structure
 - In general, entity that pays gasoline tax will have the compliance obligation
- Transferor can choose to remain the regulated party
- If fuel is sold to a person who is not a regulated party, the regulated party status can transfer if both parties agree.

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Biogas CNG Biogas LNG	Opt-in	Owner of fuel dispensing equipment in Oregon
Hydrogen	Opt-in	Owner of fuel when finished fuel is made or imported into Oregon
Gasoline Diesel Biofuels	Regulated	????

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