



# Federal Renewable Fuels Regulations

2010 NATIONAL BIO-DIESEL CONFERENCE

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### Canada's Renewable Fuels Strategy

#### **Drivers:**

- Reducing greenhouse gas emissions from fuel use
- Encouraging greater domestic production of biofuels
- Accelerating the commercialization of new biofuels technologies
- Providing new market opportunities for agricultural producers and rural communities

#### **Key elements:**

- 1. Regulations to require renewable content (Environment Canada)
- 2. Support for farmer participation through \$200 million ecoAgricultural Biofuels Capital Initiative (Agriculture and Agri-Foods Canada)
- Production incentives under the \$1.5 billion ecoENERGY for Biofuels
  program to encourage investment in biofuels industry and increase annual
  domestic production capacity (Natural Resources Canada)
- Support for next generation technologies through a \$500 million NextGen Biofuels Fund<sup>™</sup> for large scale demonstration facilities (Sustainable Development Technology Canada)









## The final *Renewable Fuels Regulations* were published on September 1, 2010

- Regulatory approach and key elements are consistent with previous government announcements
- The regulations are made under the authorities of the Canadian Environmental Protection Act, 1999 (sections 140 and 326)
  - Enforcement provisions (offences and punishment) are described in sections
     272 and 273 of the Act, not in the regulations
  - Penalties are up to \$1,000,000 and/or up to 3 years imprisonment
- The regulations require "primary suppliers" (petroleum fuel producers and importers) to have an average renewable content of at least 5% based on their volume of gasoline, commencing on December 15, 2010
- There are provisions for a 2% average renewable content requirement in diesel fuel and heating distillate oil
  - RIAS indicates this is to be implemented by 2011 or earlier, subject to technical feasibility
  - Feasibility assessment through Natural Resources Canada's demonstration initiative, which builds on the Alberta Renewable Diesel Demonstration
    - final report complete; decision expected soon
  - To be implemented by a future regulatory amendment









## Regulatory compliance is on an annual company basis

- Required renewable fuel content is based on the volumes of gasoline, diesel fuel and heating oil that a company produces or imports
- Regulations do not apply to individual facilities or provinces of import
- Not every litre of gasoline, diesel fuel and heating distillate oil produced or imported is required to contain renewable fuel
- There are some limited exemptions:
  - Companies producing and importing less than 400 m<sup>3</sup> of fuel per year
  - Fuel for use in certain specialized applications (e.g., aviation, competition vehicles, scientific research)
  - Fuel for use in the Arctic, and gasoline for use in Newfoundland and Labrador

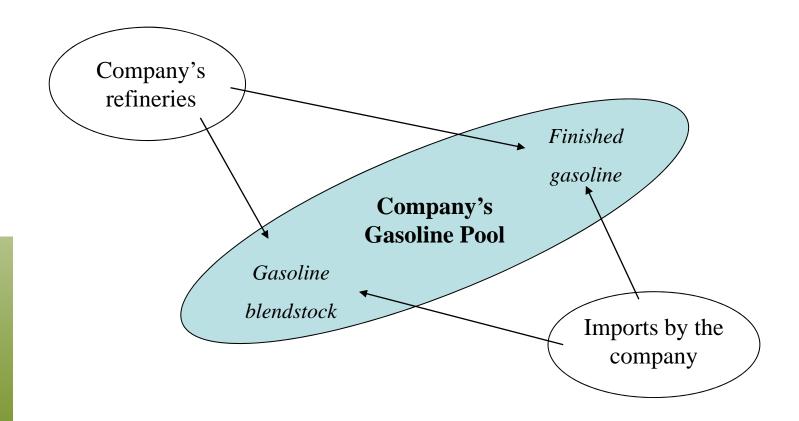








## A company's renewable fuel requirement is based on its total production plus imports



Limits apply on a company (not facility) basis









### The regulations provide a number of flexibility mechanisms

- A broad range of liquid renewable fuels may be used to meet the requirements
  - Not limited to ethanol and biodiesel
- The 5% requirement for gasoline may be met by renewable content in gasoline, diesel fuel or other liquid petroleum fuels
- The 2% requirement for diesel fuel and heating distillate oil must be met through the use of renewable content in those products
  - Renewable content in diesel fuel and heating distillate oil before the
     2% requirement starts may count towards compliance, either towards
    - 5% requirement, or
    - 2% requirement once in force (with some limitations)









## The regulations include a trading system for compliance units

- Compliance units are the basis for complying with the regulations
  - 1 distillate compliance unit = 1 litre of renewable fuel in diesel or heating oil
  - 1 gasoline compliance unit = 1 litre of renewable fuel in gasoline or fuels other than diesel or heating oil
- Companies may acquire compliance units from other parties in lieu of having renewable fuel content in their gasoline and distillate pools







### To meet the 5% requirement, a primary supplier must ...

#### Create compliance units

One CU may be created for each

litre of:

**Blending** facilities



RF blended into fue1

Refineries



A portion of biocrude used as feedstock at a refinery



**Imports** 



RF used as

neat RF

RF in a blended product that is imported

> Some units may be carried back for use in the previous period

Units not used in a compliance period may be carried forward

for use in the following period

(limitations apply)

(limitations and cancellations apply)

**Neat fuel** 

use

or

Acquire units from others











## Persons other than primary suppliers may also create compliance units

- In order to do so, a person must elect to participate in the trading system and provide registration information
- They may then create compliance units through:
  - Blending renewable fuel with petroleum fuel
  - Importing petroleum fuel with renewable content
  - Producing fuel using biocrude as a feedstock
  - Selling or using neat renewable fuel
- These elective participants may trade compliance units <u>only to</u> a primary supplier
  - Ensures compliance units get to those who need them to comply
- An elective participant (but not a primary supplier) may withdraw from the trading system



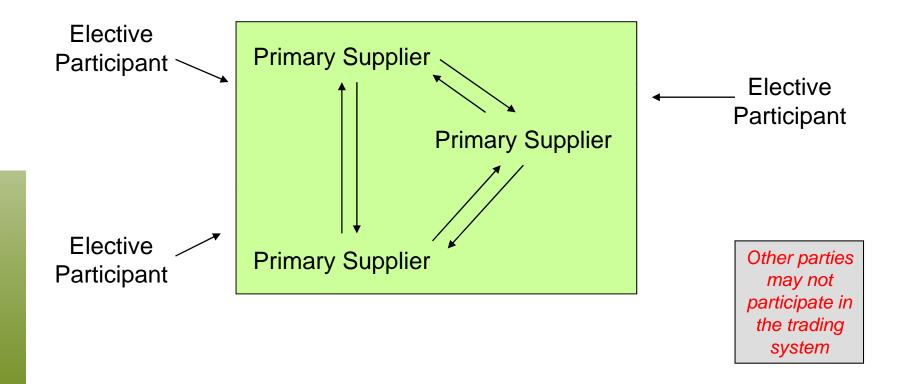






#### **Trading of Compliance Units**

Ensuring that compliance units reach obligated parties











#### Records and reports are key to the regulations

- Enforcement rests upon records and reports
- Record-keeping and reporting requirements apply to:
  - Producers and importers of gasoline, diesel fuel or heating distillate oil
  - Trading system participants who create compliance units
  - Producers and importers of renewable fuel
  - Sellers of fuel for export
- Information required includes:
  - Fuel type
  - Volumes produced, imported, exported, sold for export
  - Renewable fuel content, type, feedstock
  - Renewable fuel volumes produced, imported, acquired, sold, blended
  - Compliance units created, transferred, received, cancelled
  - Year-to-date balance of compliance units
- A third-party audit of records and reports is required annually









### Records and reporting on fuel for export are required for tracking of renewable fuels

- Sellers of fuel for export, either renewable fuel or petroleum fuels containing renewable fuel, must make a record of
  - Type of fuel
  - Renewable fuel content
  - Volumes sold
  - Renewable fuel feedstock (if known)
- Annual reporting of these volumes is required
- These requirements do not apply to sellers of small volumes for export
  - Less than 1000 m³ of fuel per gasoline compliance period (a calendar year, except for the first period)







### **Summary of key requirements**

Requirement	Primary supplier (producer or importer)	Elective participant (e.g., blender)	Seller for export (non- participant)	Producer or importer of renewable fuel *
Requirement for renewable fuel in gasoline, diesel fuel, and heating distillate oil	Yes	No	No	No
Participation in the trading system	Automatic	Optional	No	No
One-time registration	Yes	Yes	No	Yes
Annual reports	Yes	Yes	Yes	Yes
Compliance unit account book	Yes	Yes	No	No
Other records	Yes	Yes	Yes	Yes
Third-party audits	Yes	Yes	No	Yes

<sup>\*</sup> If eligible, they may elect to become an elective participant









#### Other provisions address:

- Methods for measuring volumes for:
  - Producers and importers of gasoline, diesel fuel or heating distillate oil
  - Trading system participants who create compliance units
  - Producers and importers of renewable fuel
- Ownership of compliance units (including maximum amounts) and cancellation
- Carry forward of surplus compliance units; carry back into previous year
- For high-renewable-content fuels\* and neat renewable fuels, additional records demonstrating:
  - Self-use, or
  - Information made available to consumers through documentation or pump labelling

(\* high-renewable-content fuels: >5% for diesel fuel, >10% for gasoline, >25% for other liquid petroleum fuels)

Retention of records in Canada for 5 years









### Structure of the draft Renewable Fuels Regulations parts, sections and schedules

#### **General provisions**

- 1. Interpretation
- Application
- Special opt-in for non-applicants
- Measurement of volumes

#### Part 1: Requirements pertaining to gasoline, diesel fuel and heating distillate oil

- 5. Prescribed quantities of renewable fuel
- 6. Gasoline pool and distillate pool how calculated
- 7. Use of compliance units
- 8. Volume of renewable fuel formulas
- Registration as a primary supplier

#### Part 2: Compliance unit trading system

- 10. Participants in the trading system definition
- 11. Election to become an elective participant
- 12. Creation of compliance units creator
- 13. Creation of compliance units -- blending
- 14. Creation of compliance units importation
- 15. Creation of compliance units biocrude
- 16. Creation of compliance units neat renewable fuel
- 17. Limitation on creation
- 18. Ownership of compliance units
- 19. Maximum number of compliance units owned
- 20. Trading of compliance units
- 21. Carry forward of compliance units primary supplier (gasoline)
- 22. Carry forward of compliance units primary supplier (distillate)
- 23. Carry forward of compliance units elective participant
- 24. Carry back of compliance units
- 25. Cancellation of compliance units

#### Part 3: Records and Reporting

- 26. Request for for samples and records
- 27. Form and format of reports
- 28. Auditor's report
- 29. Records primary supplier
- 30. Annual report primary supplier
- 31. Compliance unit account book
- 32. Additional records for participants in the trading system
- 33. Annual report participants in the trading system
- Records and reporting for producers and importers of renewable fuels
- 35. Report on measurement methods
- 36. Records and reporting by sellers of fuels for export
- Record-making
- 38. Retention of information
- 39. Interim reports
- 40. Coming into force

#### **Schedules**

- Registration report primary suppliers
- 2. Registration report participants in the trading system
- 3. Auditor's report
- 4. Annual report primary suppliers
- 5. Annual report participants in the trading system
- 6. Registration report producer or importer of renewable fuel
- 7. Annual report producer or importer of renewable fuel
- 8. Report on measurement methods



### Some key regulatory dates:

- December 14, 2010: Registration reports are due
- December 15, 2010: Start of gasoline requirement
- February 19, 2011: End of transitional period for measurements and report on measurement methods is due
- Early 2012: Interim reports are due
- December 31, 2012: End of first gasoline compliance period
- Early 2013: First compliance period reports are due
- To be determined: Start of distillate requirements









## Implementation support and more information:

Available at Environment Canada's Renewable Fuels site:

http://www.ec.gc.ca/energie-energy/default.asp?lang=En&n=0AA71ED2-1

- Link to the Regulations
- Detailed technical Question & Answer document
- Fact sheets:
  - Overview and trading system
  - Primary suppliers
  - Distillate-only primary suppliers
  - Blending operations
  - Renewable fuel producers and importers
  - High-renewable-content and neat renewable fuels
  - Sellers of fuel for export
- Coming soon:
  - Presentations from October information sessions (November 2010)
  - Forms for registration reports (November 2010)
  - Spreadsheet for compliance unit account book (Fall 2010)
  - Electronic reporting system (under development; testing planned in Fall 2011)









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