Biofuels: For Certification and Beyond

Presentation Neste Oil at RSPO RT12
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Neste Oil in a brief

A refining and marketing company focused on premium-quality traffic fuels

Refining capacity: 15 million t/a of petroleum products and 2 million t/a of renewable diesel

Operations in 15 countries; employs approx. 5,000 people

Listed on the Helsinki Stock Exchange

Largest owner: the Finnish State (50.1%)

Net sales: €17.5 billion (2013)

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Range of Renewable Raw Materials

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<td>100%</td>
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<td>52%</td>
<td>Share of waste and residue feedstock used</td>
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40-90% GHG reduction based on EU RED methods

54,000 Certified smallholders supplying to Neste Oil

Business as usual policies are not enough and change is needed

**Current Policies**

**New Policies**

**Target: 450 Scenario***

*The 450 Scenario sets out an energy pathway that limits the increase in global temperature to 2°C (450 parts per million of greenhouse gases).

**IEA: World Energy Outlook 2013 (redrawn)**

Energy related CO₂ emissions, transport 6.7 Gt of this in 2011

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**Biofuels contribution to emission reductions in the transport sector**

- **2010:** 5.0 Gt (5.0 %)
- **2020:** 10.0 Gt (8.5 %)
- **2030:** 16.5 Gt (14.9 %)
- **2040:** 31.5 Gt (27.3 %)
- **2050:** 41.4 Gt (33.4 %)

- By 2050 biofuels provide 27% of total transport fuel, and avoid around 2.1 Gt CO₂ emissions per year when produced sustainably.
- Source: IEA Biofuels for Transport Roadmap (2011)
Sustainability is regulated for Biofuels

- Compared to other industries, Biofuels industry is **highly regulated**
- Regulation for biofuels are designed as a clear alternative to traditional fuels, based on country-based mandate, aimed to:
  - Manage Impacts of Climate Change
  - Improve Security of Supply
  - Support Agriculture
  - Demonstrate GHG savings compared to fossil fuels
  - Assure the sustainability of the supply chain
  - Set clear target and mandates (not subsidies) for biofuels
- Regulations thus are made to:
  - Neste Oil has observed the increasing tendency of industrialized countries to establish regulations for the sustainability of biofuels.
  - Different countries/markets have different definitions for sustainability, however it essentially covers the same requirements for the supply chain.

The European Union Renewable Energy Directive (EU-RED)

- Directive 2009/28/EC (RED) promotes the use of renewable energy and defines the framework for sustainability certification
  - Article 17, 18, 19 and the annex laid out the requirements for biofuel use in the EU
  - 10% of energy used in transport to be from renewable sources
  - Biofuel for transport must achieve 35% Greenhouse Gas (GHG) savings compared to fossil fuels (2017 – 50%, 2018 – 60%). The Fuel Quality Directive will aim for higher savings.
  - However waste and residue definitions are left to individual member states
Opportunity in upgrading to RSPO-RED

- Why RSPO-RED?
  - Demand for GHG data is expected to widen to other palm oil users in the future. Feedstock plays a big impact in GHG emissions.
  - RSPO-RED contains GHG calculation requirements (based on EU-RED methodology). Company complying with this requirement would be ahead of the competition.
  - It's a certification for a regulated fixed market. Biofuel sustainability certification is compulsory in the EU. Demand will be regulated by law.
  - Large volume needs. 10% of 220 million tonnes of diesel currently being used in the EU need to be renewable. Palm Oil is the most competitive oil to fill this gap.
  - RSPO-RED certification is only a simple upgrade to existing RSPO certification. RSPO-RED audit can be included in the scope of the next surveillance audit.

Neste Oil Certification Experience

- In 2013, Neste Oil refineries, storages and relevant supply chains are certified with ISCC, RSPO-RED and DDC.
  - We have experience in previous years assisting our suppliers for gap assessment against ISCC standards.
- Most Neste Oil palm oil suppliers are certified with ISCC, and RSPO and some are segregated.
  - Certification audits are done by the suppliers.
  - Certification includes smallholders and their supply chain.
  - We increased smallholder certified palm oil volume from 9,000 families to 54,000 families.
  - More suppliers are certified compared to the first time we started buying (starting from zero).
- However despite all the certification we have, negative campaigns and concerns on the use of Palm Oil still is gaining strength.
Neste Oil Position – Preferred supply

Increasing waste and residues
- Supply from palm residues such as PFAD
- Using Neste Oil HVO Verification Scheme

Improving traceability and supply chain management
- Traceability beyond mass balance (third party suppliers)
- Company procurement policies must apply to third party suppliers

Going beyond Certification Requirements
- No-peat, No-HCS policy against deforestation
- Social issues, labour rights, Fair treatment of workers according to ILO

Further GHG savings improvements
- Installation of methane capture to mills
- Implementation of methane avoidance systems

Our Supplier Compliance Criteria

Neste Oil has a strict approach to Supplier Selection

Neste Oil Sustainability Compliance

Neste Oil’s Sustainability Policy
- No-Deforestation Guideline

Multi-stakeholder initiatives
- Eg: RSPO

National and International Regulations
- Eg: ISPO, ILO

Market (mandate) Based Requirement
- Eg: RFS US EPA, EU-RED

RSPO=Roundtable For Sustainable Palm Oil
ISPO = Indonesian Sustainable Palm Oil System
ILO = International Labour Organization
RFS US EPA = Renewable Fuel Standard as issued by United States Environmental Protection Agency
Why does it matter?

**Reporting Requirements**
- Companies are required to report on their social practices to the regulators and stakeholders
  
  *Eg. Finnish law and Singapore agency requires government companies to report on their social commitments*

**Biofuels Regulations**
- Public consultation processes in drafting related regulations enables
  
  *Eg. EU RED have been considering to include Social criteria, NGOs have been giving their input*

**Consumer and Market Perception**
- NGO campaigns pressure consumer to adapt more responsible attitude in choosing products
- Brands are campaigned against openly
  
  *Eg. Traceability of products are now*

**Global Commitments and Trends**
- Countries have committed to more responsible practices and targets for sustainable practices (climate change and social issues). This has also lead companies to join in the commitments
  
  *Eg: Indonesia committed to GHG reductions, Neste Oil signed the UN global compact*

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Summary

- Biofuels market is a highly regulated market
- RSPO-RED is a simple upgrade to RSPO offering opportunities to the EU market
- Neste Oil prefers supply which fulfil our policies and principles
Thank you.

Adrian Suharto – Manager, Sustainability
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