

# Johan Granath Ekman & Co

*How to source and certify sustainable  
feedstock for the largest wood pellet  
plant in the world*

19<sup>th</sup> European Biomass Conference



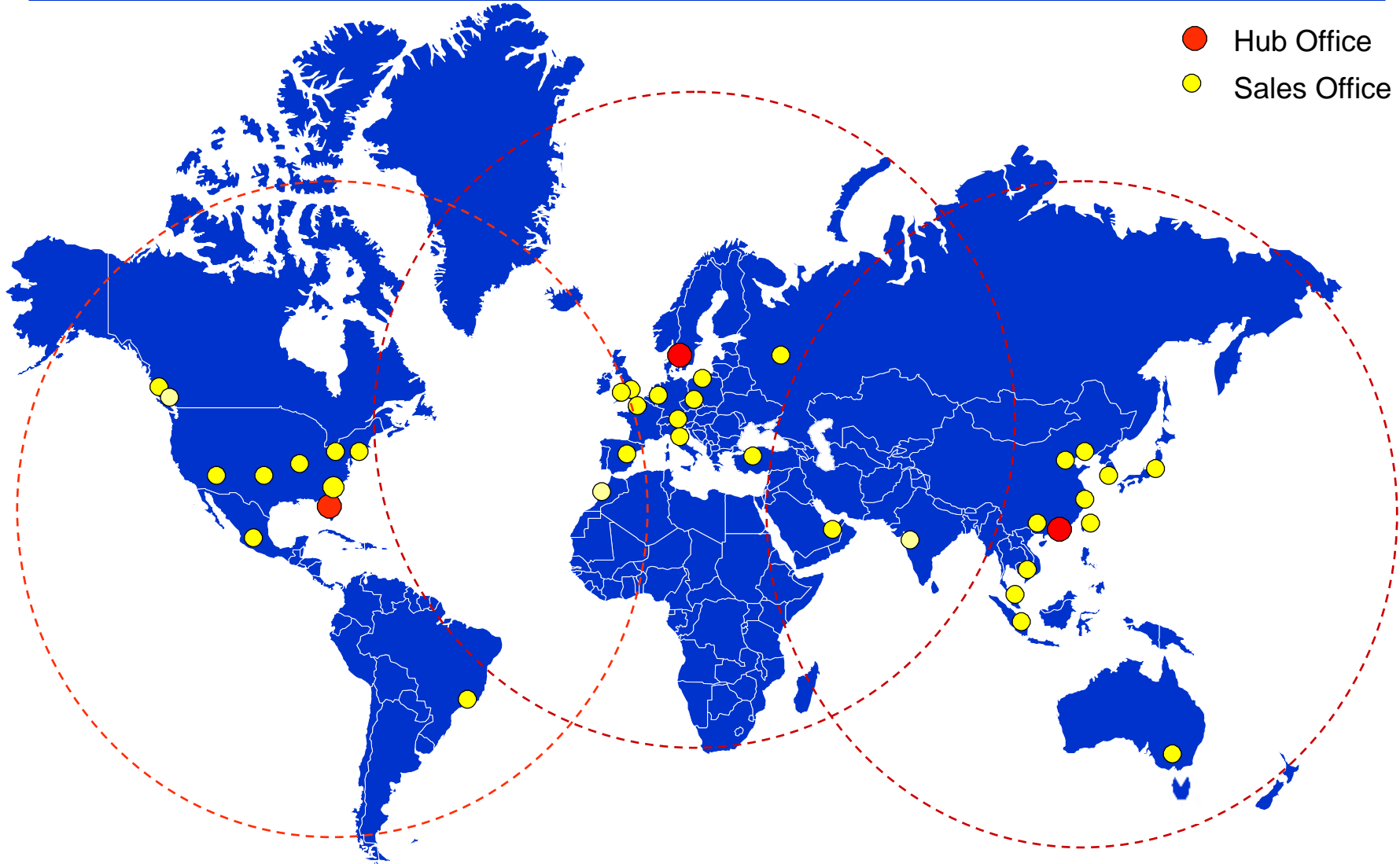
# Ekman & Co AB

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- Established by the Ekman family in 1802
- Owned by the Ekman family and the employees
- One of the world's leading sales and marketing organizations, focusing in the global forest industry
- Employs 187 people at about 40 locations worldwide
- Additionally represented in more than 100 countries
- Ships about 3.3 million tons of pulp, paper, biomass and recovered material annually
- 2010 turnover: US\$2.1 billion
- Coordinated via three regional hubs

# Ekman Group of Companies

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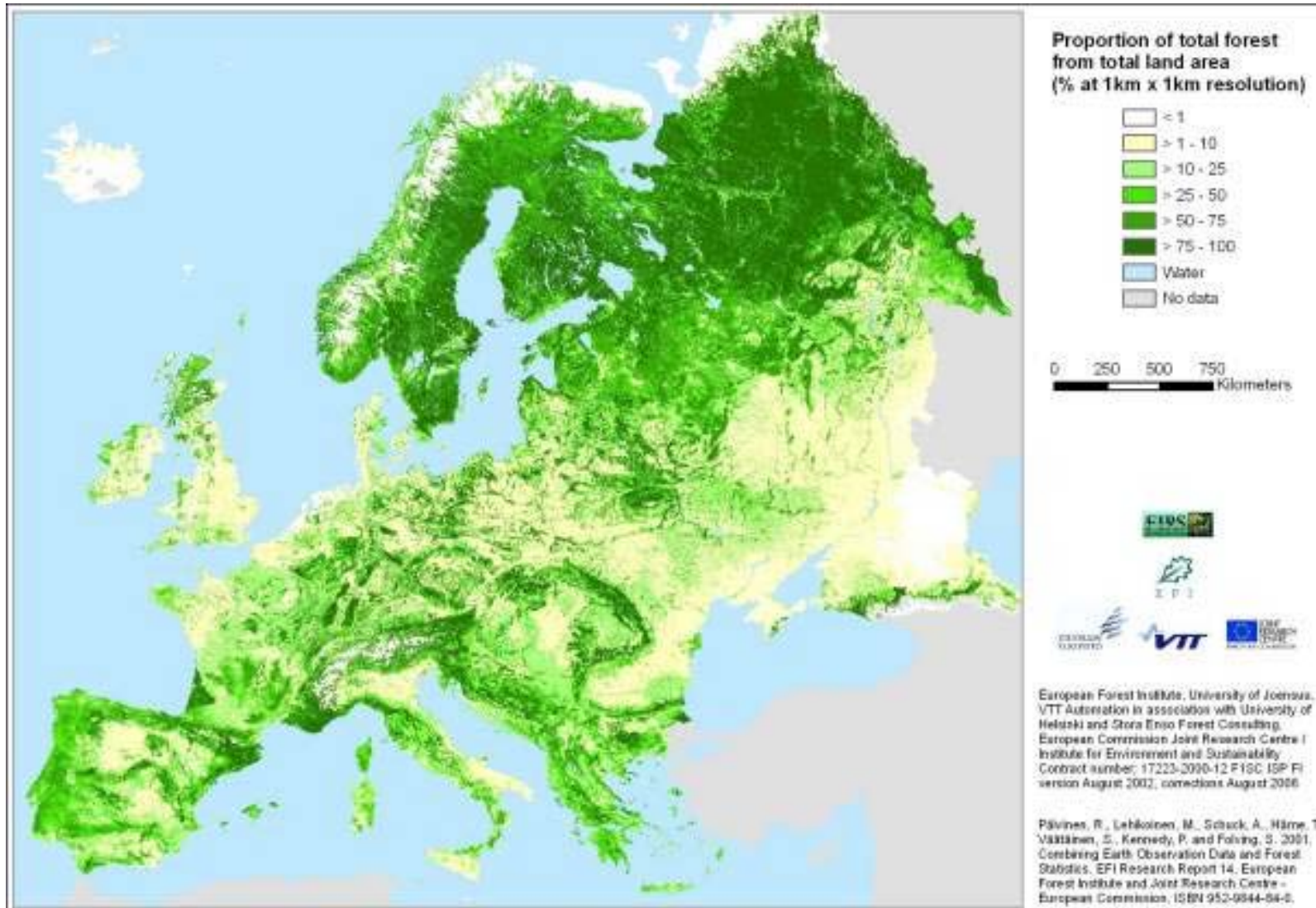


# Vyborgskaya Cellulose

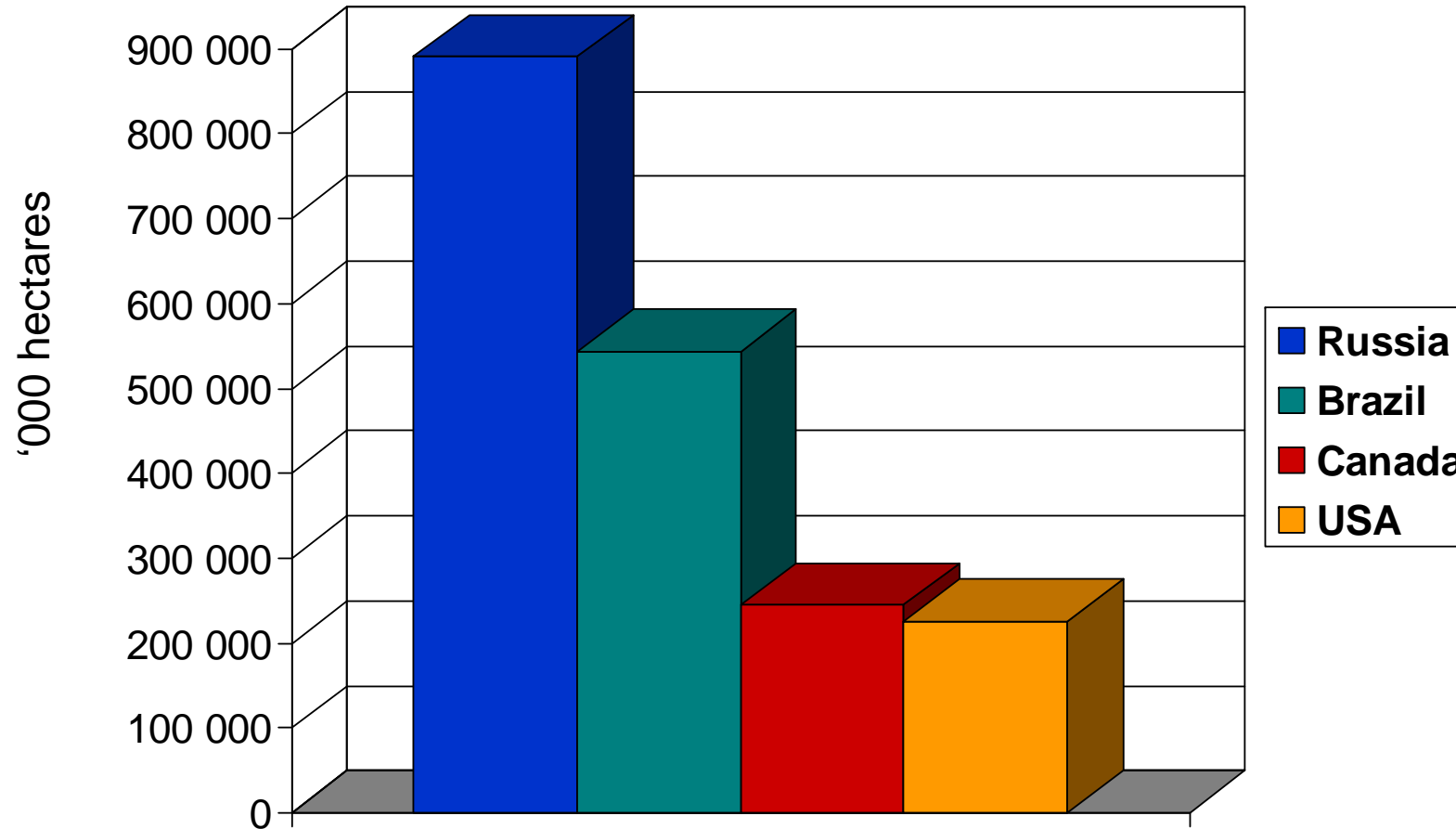
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- 900,000 ton annual wood pellet production
- Annual roundwood requirement = 2 million m<sup>3</sup>
- Ekman & Co exclusive sales agent
- Production based on roundwood from Russia
- Turnkey delivery from ANDRITZ Group
- - 2 wood processing lines
- - 4 belt dryers
- - 16 Hammer mills
- - 36 pellet presses
- Integration with pulp&paper mill provides economies of scale
- Focus on industrial market – possibility to target consumer market

# Forests in Europe



# World's largest forests (source FAO)



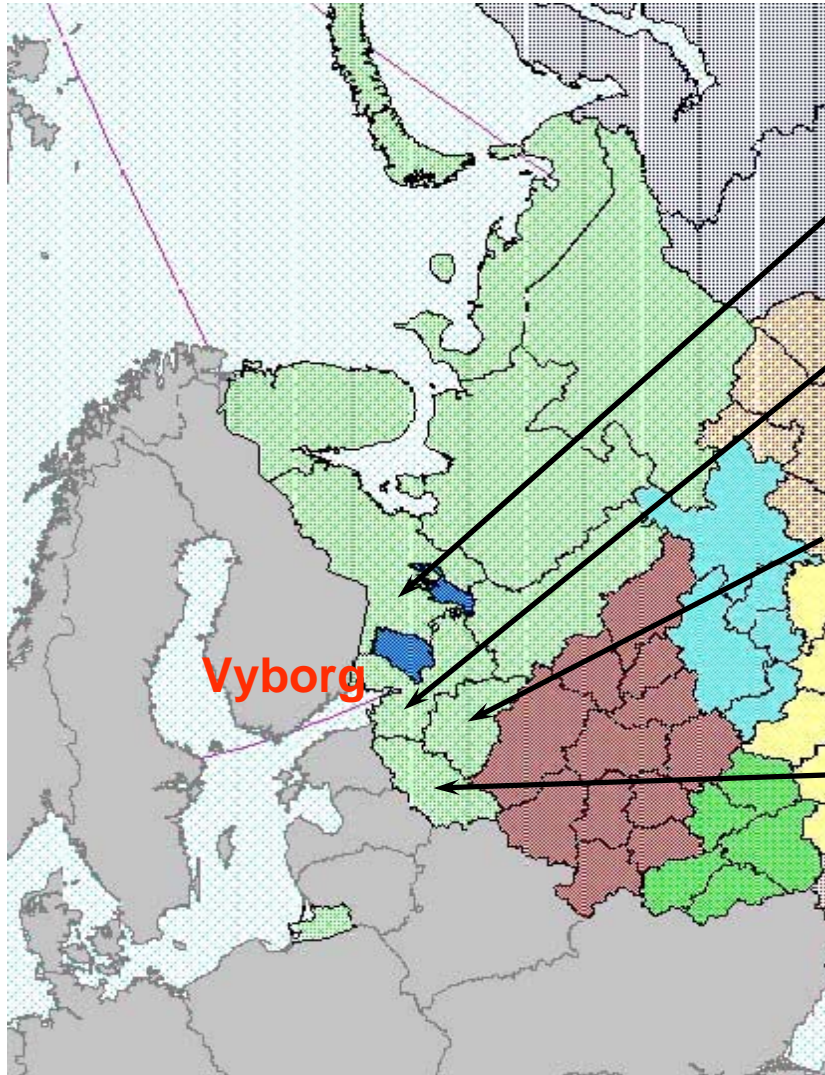
# Russian Federation forests (source O. Rakitova WICNWR)

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- Russia has more than 23% of the world's wood
- North west Russia has 17% of all Russian forests
- Russia has over 14 billion m<sup>3</sup> of forest
- Theoretical sustainable annual cut should be 103 million m<sup>3</sup>/year
- Economically accessible annual cut is 58.8 million m<sup>3</sup>/year
- Harvested volume is about 43 million m<sup>3</sup>/year



# Location of Vyborgskaya forest leases



## 1. Republic of Karelia

Roundwood purchased from FSC sources

## 2. Leningrad region

Forest leases with annual cutting rights of 450 000 m<sup>3</sup>

## 3. Novgorod region

Forest leases with annual cutting rights for 500 000 m<sup>3</sup>

## 4. Pskov region

Forest leases with annual cutting rights of 850 000 m<sup>3</sup>



# Vyborgskaya Cellulose FSC certification

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- FSC promotes responsible forest management in countries worldwide
- Vyborgskaya completed an FSC pre scope audit during May 2011 with the intention of receiving full FSC certification
- Typically it takes 3 years to obtain full FSC certification
- Forest leases are very lengthy documents with precise data of tree species age etc. and detailing the responsibilities and duties of the lessee

# Vyborgskaya Cellulose port facility

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- 50% of all raw material will be transported to the pellet plant by river vessels this will considerably reduce the carbon footprint
- Vyborgskaya have bought a river shipping company with 8 river vessels
- A purpose built port is under construction which will set new standards for wood pellet exports
- Ability to load up to 5 vessels simultaneously

## Harvesting operations for 2 million m<sup>3</sup> of round wood

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- Initially subcontractors will be used for harvesting operations
- Difficult to find and hire trained operators
- Long term plan is to have own harvesting operations
- Vyborgskaya have purchased 16 Ponsse harvesters & 32 Ponsse forwarders
- 50 Scania and 50 Mercedes trucks for transporting logs
- Average distance for road haulage is 250 km

## Is sustainability a global, national or company issue?

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- If each country adopts it's own sustainability criteria we could have 27 different rules to work to!
- After several years of trying only one member country from the EU Germany has managed to put criteria in place for sustainable biofuels
- At present each solid biomass end user has it's own sustainability criteria and we already have 10 different requirements to work to
- All the major wood pellet users accept each others sustainability standards so why not have a single standard
- CO2 emissions don't stay within national or company boundaries

# Clean Coal vs Biomass + many CO2 add ons

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## Existing schemes don't compare apples with apples?

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### Coal

- CO2 during combustion

### Biomass + CO2 add ons

- CO2 during harvesting
- CO2 during transport to road or riverside
- CO2 during transport to pellet plant
- CO2 during de-barking and chipping
- CO2 during drying
- CO2 of all electricity used during manufacturing process
- CO2 of transport to port
- CO2 of shipping to power plant
- CO2 during combustion



## GHG savings performance

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- The UK government have introduced a **Minimum 60% GHG emission saving** relative to fossil fuel (equates to 285 kgCO<sub>2</sub>/MWh or lower)
- For generators of 1MW or above, in April 2013, receipt of ROCs will be formally linked to meeting criteria
- Does solid biomass really have to be twice as good as fossil fuels before it makes sense to use it?
- Member states should only provide support to biomass that meet the EU standard, but should not impose tougher criteria thus ensuring a level playing field

## Is an EU sustainability criteria needed?

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- YES!
- We should not repeat the mistakes of the biofuels sector
- The obligation for sustainable biofuels has been applicable since 5 December 2010
- Only Germany has implemented a sustainability scheme for biofuels at a national level all of the other 26 EU member states are struggling
- There are 14 voluntary schemes for biofuels, however none of these voluntary schemes have been accredited

## Reasons for EU sustainability criteria

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- Harmonised sustainability criteria would diminish uncertainties
- Creating an EU sustainability criteria for solid biomass would reassure consumers and producers alike and help avoid the mistrust the biofuels market suffers from
- Existing forestry schemes should form the cornerstone of any solid biomass sustainability scheme
- Small private forests should not have the same administrative burden as large forest owners or state owned forests
- By having an EU sustainability criteria audits could not be abused to obtain sensitive commercial data

*Thank you for your attention*

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