Biomass or Biomess?

Stakeholder opinions and risk mitigation options for European energy companies

Charlotte Sluka, 28.6.2012
European energy providers in the woody biomass sector must address stakeholder sustainability concerns in order to manage financial, reputational, regulatory and competitive risks.

- Sharp increase in anti-biomass campaigns
- Negative media attention – excerpts from The Guardian, The Times, F.A.Z., Handelsblatt:

“The sustainability of biomass will be a major threat to the business in the future” (Industry representative, pers. comm.).

“...renewable energy targets are driving tree-cutting for biomass energy – and may cause Europe to miss its 2020 carbon target.”

“EU carbon target threatened by biomass ‘insanity’”

“there are already reports of concessions being granted for the destruction of rainforests to establish tree plantations for wood chips and wood pellets, as a result of the growing global market in biomass”

“there might be no natural forests left by 2065 as a result of this increased demand for wood”
Can the application of sustainability schemes help utilities address European stakeholder concerns over the use of forest biomass in large-scale energy generation?
Research design

Step 1 - Primary Research

- 20 Interviews
- Online survey: 120 respondents (response rate 30%)
Research design

Step 1 - Primary Research

- 20 Interviews
- Online survey: 120 respondents (response rate 30%)

Respondents to online survey.
## Research design

### Step 2 - Examination of sustainability schemes

<table>
<thead>
<tr>
<th>Legislative Requirements</th>
<th>Utility Company Schemes</th>
<th>Voluntary Certification Schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IWPB, E.ON, GGL, Laborelec</td>
<td>Forest Certification Schemes (FSC, PEFC)</td>
</tr>
<tr>
<td>RED Timber Regulation</td>
<td></td>
<td>Stepwise Programmes (GFTN, Smartstep)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legality Verification Schemes (TLTV VLC, Smartwood VLC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RED Biofuel Schemes (ISCC)</td>
</tr>
</tbody>
</table>
"Companies may have taken the decision to get involved in biomass without knowing how the carbon issue would develop. Should the public debate on this turn in a couple of years, then the investments being made now could be at risk" (Industry representative, pers. comm.).
"Questioning the carbon neutrality assumption would be regarded as heresy. All that is currently admitted to is some sort of indirect (i.e., uncertain, therefore less important) impact. It is not unlike considering the Earth the centre of the Universe, with the Sun and everything else revolving around it, but then admitting that they move in a complicated sort of way (sometimes backwards). Unfortunately, the carbon neutrality assumption is more dangerous than the geocentric model: the Ptolemaic system was imperfect, but did not do any damage, while the carbon neutrality assumption can have truly catastrophic consequences” (EU Official, pers. comm.).
(2) Social & economic criteria
(3) Standard-setting, monitoring & governance mechanisms

- Preoccupation among stakeholders with verification reflects justified concerns over corruption.

“My information on the FSC in the tropical region is that it is routinely violated by traders able to ‘work the system’, for instance by double book-keeping or false trails” (Corporate interviewee, pers. comm.).
Do existing sustainability schemes address stakeholder concerns?

(1) Brief introduction to the sustainability schemes

<table>
<thead>
<tr>
<th>Legislative Requirements</th>
<th>Utility Company Schemes</th>
<th>Voluntary Certification Schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>IWPB</td>
<td>Forest Certification Schemes</td>
</tr>
<tr>
<td>Timber Regulation</td>
<td>E.ON</td>
<td>Stepwise Programmes</td>
</tr>
<tr>
<td></td>
<td>GGL</td>
<td>Legality Verification Schemes</td>
</tr>
<tr>
<td></td>
<td>Laborelec</td>
<td>RED Biofuel Schemes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FSC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GFTN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TLTV VLC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ISCC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smartstep</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smartwood VLC</td>
</tr>
</tbody>
</table>

Summary of standards & criteria can be found in the Comparative Table.

Excel table of detailed criteria available online at
https://skydrive.live.com/redir.aspx?cid=2737f0fc37314f1c&resid=2737F0FC37314F1C!344&parid=root

No scheme covers all or even the most important stakeholder concerns.
Do sustainability schemes address stakeholder concerns?

(2) Stakeholder perceptions of sustainability schemes

Stakeholder ratings of sustainability schemes
Do sustainability schemes address stakeholder concerns?

(2) Stakeholder perceptions of sustainability schemes

Percentage of respondents familiar with sustainability schemes
Severe limitations to sustainability schemes exist

- Fraud, corruption and other illegal practices are the main challenges to sustainability certification (FAO, 2010).

“Certification schemes are about products made in countries where corruption, poor governance and a total lack of accountability and disregard for habitats and forests is the norm or certainly endemic” (NGO representative, pers. comm.).

- Indirect effects, such as higher wood prices causing increased logging in other parts of the world.

- Risk of being accused of greenwashing.

“Utility companies just want a stamp to make biomass look sustainable” (FAO Representative, pers.comm.)
Conclusions & Recommendations

• No scheme addresses all stakeholder concerns.

• Certification is a must – but may not appease the surprisingly high number of fervent opponents to solid biomass exploitation found at the governmental level, in research institutes and even among representatives from the private sector.

“What you are saying to the public is that you are going to Brazil and burning its forests, without having done anything useful with the wood beforehand. This will be a real issue when it comes to communicating with the public. We can’t say clearly and succinctly why this is good” (Industry Representative, pers.comm).
Conclusions & Recommendations

• No scheme addresses all stakeholder concerns.

• Certification is a must – but may not appease the surprisingly high number of fervent opponents to solid biomass exploitation found at the governmental level, in research institutes and even among representatives from the private sector.

“Importing wood chips for electricity does not seem to be a good strategy. It is shocking how much we are paying for electricity in terms of subsidies and to what extent transparency is lacking” (EU Official, pers.comm).
Conclusions & Recommendations

• No scheme addresses all stakeholder concerns.

• Certification is a must – but may not appease the surprisingly high number of fervent opponents to solid biomass exploitation found at the governmental level, in research institutes and even among representatives from the private sector.

“At a time of a carbon overloaded atmosphere, polluted air and stressed forests, increased cutting and burning of forests is about the dumbest thing we can do. So called ‘green’ groups promoting such stupidity should be exposed for their complicity in the destruction of the world’s forests, and increases in carbon emissions. Cutting and burning forests is NOT ‘green’ energy, and never will be” (NGO Representative, pers.comm).
Conclusions & Recommendations

• No scheme addresses all stakeholder concerns.

• Certification is a must – but may not appease the surprisingly high number of fervent opponents to solid biomass exploitation found at the governmental level, in research institutes and even among representatives from the private sector.

• Utilities must account for sustainability risks in their medium- to long-term strategies before locking themselves into substantive infrastructure investments: sustainability concerns can only be managed but unlikely to be solved.

Go beyond certification:
• Try to source less controversial sources of wood:
  • From within Europe
  • Wood waste & branches – build industrial synergies, cascade use

• Corruption: establish risk profiles of countries & suppliers

• Self-limitation by industry on the total amounts of biomass to be sourced?
Thank you!

WHAT'S THAT OLD SAYING, "THEY CAN'T SEE THE FOREST FOR...?"

THE BIOMASS PLANT.