The Renewable Energy Directive – national targets, costs, state of play and compliance questions

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http://www.inforse.org/europe/seminar08_BXL.htm
1. Sets mandatory national targets for renewable energy shares, including 10% biofuels share, in 2020 (Articles 3 and 5)

2. Requires national action plans (Article 4)

3. Standardises “guarantees of origin” (certifying the renewable origin of electricity or heat) and enables the transfer of these to provide flexibility to Member States (Articles 6, 7, 8, 9 and 10)

4. Requires reduction of administrative and regulatory barriers to the growth of renewable energy (Article 12), improvements in provision of information and training (Article 13) and improves renewables’ access to the electricity grid (Article 14)

5. Creates a sustainability regime for biofuels (Articles 15-18)
Renewable energy Directive - target setting

• 20% mandatory renewable energy share in 2020 across EU
  – 11.5% increase compared to 2005

• Effort sharing:
  – Half of the increase needed (5.5%) for all MS
  – Rest weighted by GDP
  – Early action after 2001 accounted for

• Giving total efforts between 6.2% - 13.7% per MS
  – Cap on max 50% share
Renewable energy Directive – national 2020 targets

<table>
<thead>
<tr>
<th>Country</th>
<th>RES share in 2020</th>
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<tbody>
<tr>
<td>BE</td>
<td>13%</td>
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<tr>
<td>BG</td>
<td>16%</td>
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<tr>
<td>CZ</td>
<td>13%</td>
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<tr>
<td>DK</td>
<td>18%</td>
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<td>DE</td>
<td>25%</td>
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<td>EE</td>
<td>16%</td>
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<td>IE</td>
<td>20%</td>
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<td>EL</td>
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<td>IT</td>
<td>13%</td>
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<td>CY</td>
<td>17%</td>
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<td>LV</td>
<td>42%</td>
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<td>LT</td>
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<tr>
<td>LU</td>
<td>11%</td>
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<td>HU</td>
<td>13%</td>
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<td>MT</td>
<td>10%</td>
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<td>NL</td>
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<td>AT</td>
<td>14%</td>
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<td>31%</td>
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<tr>
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<td>24%</td>
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<td>SK</td>
<td>25%</td>
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<tr>
<td>FI</td>
<td>38%</td>
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<tr>
<td>SE</td>
<td>49%</td>
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<tr>
<td>UK</td>
<td>15%</td>
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</table>
## EU-27 efforts in Renewables
### Increase for each Member State

<table>
<thead>
<tr>
<th>Country</th>
<th>2022 Total Increase</th>
<th>2023 Total Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>2.2%</td>
<td>10.8%</td>
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<tr>
<td>BG</td>
<td>9.4%</td>
<td>6.6%</td>
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<tr>
<td>CZ</td>
<td>6.1%</td>
<td>6.9%</td>
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<tr>
<td>DK</td>
<td>17.0%</td>
<td>13%</td>
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<tr>
<td>DE</td>
<td>5.8%</td>
<td>12.2%</td>
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<td>18%</td>
<td>7%</td>
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<td>11.1%</td>
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<tr>
<td>LT</td>
<td>8%</td>
<td>7.1%</td>
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<tr>
<td>LU</td>
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<td>FI</td>
<td>28.5%</td>
<td>9.5%</td>
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<tr>
<td>SE</td>
<td>39.8%</td>
<td>10.2%</td>
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<tr>
<td>UK</td>
<td>13.7%</td>
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</table>

**Total increase (flat rate + GDP)**
Transfer of Guarantees of Origin (GO) gives the flexibility to meet national targets by developing cheaper renewable energy in other Member States.

- Member States meeting their trajectory may transfer GO’s to other Member States.

- GO’s from new installations may be transferred by companies (“persons”).

- Member States may create a system to require prior government approval of such transfers.
### Summary of impacts at EU level of a 20% renewable energy target for 2020

<table>
<thead>
<tr>
<th>Impact</th>
<th>20% target*</th>
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<tbody>
<tr>
<td>Cumulative additional production costs (2005-2020) €bn</td>
<td>125-290</td>
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<tr>
<td>Annual average additional costs €bn</td>
<td>13-18</td>
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<tr>
<td>Additional cost in 2020 €bn</td>
<td>0-31</td>
</tr>
<tr>
<td>Reduction in GHG (Mt p.a.)</td>
<td>600-900</td>
</tr>
<tr>
<td>Reduced fossil fuel Mt</td>
<td>200-300</td>
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<tr>
<td>Δ GDP (%)</td>
<td>-0.05 - 0.5</td>
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<tr>
<td>Δ employment</td>
<td>~ +650,000</td>
</tr>
</tbody>
</table>

* Range chiefly reflects oil price range $48 - $78
Renewable energy Directive - support schemes

Support to wind onshore – efficiency and effectiveness

Source: OPTRES, 2007
• **Article 3(2)** – Member States shall introduce *appropriate measures* to ensure that the share of renewable energy equals or exceeds that shown in the indicative trajectory.

• **Article 4(1)** - *National Action Plans* required, setting sectoral targets and defining adequate measures to reach targets as well as other requirements in the directive.

• **Article 4(2)** – Member States shall submit a *new National Action Plan* if their renewable share falls below the indicative trajectory.

• **Article 9(1)** - *Transfer of guarantees of origin* to another Member State is *not permitted* if a Member State’s renewable share falls below the indicative trajectory.
Thank you for your attention!

For more information:
http://ec.europa.eu/energy/index_en.html