Climate change, air quality and health

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Health & Environment Alliance (HEAL)

Session 3.4. – Air quality, energy and climate change: triple challenge, triple opportunity
EU Green Week, 5 June 2013
The Health and Environment Alliance (HEAL) is a leading European not-for-profit organisation addressing how the environment affects health in the European Union. We demonstrate how policy changes can help protect health and enhance people’s quality of life.

HEAL brings independent expertise and evidence from the health community to different decision-making processes.
Over 65 members in 30 different countries

Our Network

Creating synergies & advocating for better policies at EU and international level
Climate change and health

The bad news:
“Climate change may be the biggest global health threat of the 21st century”
World Health Organisation

The good news:
“If properly chosen, action to combat climate change, can, of itself, lead to improvements in health. The news is not all bad.”

The Lancet 2009: Health and Climate Change:
Lancet 2009: Public health benefits of strategies to reduce GHG emissions:
• Household energy
• Transport
• Low-carbon electricity generation
• Food and agriculture
• Short-lived greenhouse pollutants (SLCFs)

June 2013:
Dozens of studies on health co-benefits

WHO: Health in the Green Economy Series:
Examples of triple win for climate, air quality and health

Agriculture:
Shift to diet with less meat, or vegetarian

Transport:
Switch to walking, cycling (active transportation)

Energy:
Renewable energy
Energy efficient buildings (climate and health friendly)

Study: Behavioural Climate change mitigation options, 2012:
http://ec.europa.eu/clima/policies/roadmap/studies_en.htm
Respiratory, cardiovascular diseases set to benefit from stronger climate targets

- **18 country analysis** (CAFE CBA methodology) of public health benefits for moving to a 30% GHG emissions reduction target
- Anticipated health savings estimated at **up to 30.5 billion Euros per year by 2020** if the EU moved towards the higher **30% domestic target**.
- **Country launches**: France, Hungary, Poland, Czech Republic
### Additional health benefits for individual EU Member States – moving from 20% to 30%

<table>
<thead>
<tr>
<th>Member State</th>
<th>EU COMMISSION 25% internal: mortality only</th>
<th>HEAL 25% internal: morbidity + mortality</th>
<th>30% internal: morbidity + mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>59 – 136 € millions per year</td>
<td>101 – 291 € millions per year</td>
<td>210 – 606 € millions per year</td>
</tr>
<tr>
<td>Belgium</td>
<td>112 – 258 € millions per year</td>
<td>153 – 442 € millions per year</td>
<td>320 – 923 € millions per year</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>59 – 134 € millions per year</td>
<td>48 – 140 € millions per year</td>
<td>101 – 291 € millions per year</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>114 – 263 € millions per year</td>
<td>224 – 646 € millions per year</td>
<td>467 – 1347 € millions per year</td>
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<tr>
<td>France</td>
<td>224 – 516 € millions per year</td>
<td>578 – 1669 € millions per year</td>
<td>1206 – 3481 € millions per year</td>
</tr>
<tr>
<td>Germany</td>
<td>779 – 1796 € millions per year</td>
<td>1353 – 3905 € millions per year</td>
<td>2822 – 8144 € millions per year</td>
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<tr>
<td>Greece</td>
<td>59 – 136 € millions per year</td>
<td>159 – 458 € millions per year</td>
<td>375 – 1081 € millions per year</td>
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<tr>
<td>Hungary</td>
<td>105 – 204 € millions per year</td>
<td>180 – 518 € millions per year</td>
<td>380 – 1097 € millions per year</td>
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<tr>
<td>Italy</td>
<td>397 – 912 € millions per year</td>
<td>563 – 1624 € millions per year</td>
<td>1174 – 3388 € millions per year</td>
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<tr>
<td>Netherlands</td>
<td>168 – 388 € millions per year</td>
<td>182 – 526 € millions per year</td>
<td>380 – 1097 € millions per year</td>
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<tr>
<td>Poland</td>
<td>442 – 1019 € millions per year</td>
<td>672 – 1938 € millions per year</td>
<td>1401 – 4042 € millions per year</td>
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<tr>
<td>Romania</td>
<td>161 – 370 € millions per year</td>
<td>226 – 651 € millions per year</td>
<td>471 – 1358 € millions per year</td>
</tr>
<tr>
<td>Slovakia</td>
<td>47 – 107 € millions per year</td>
<td>121 – 348 € millions per year</td>
<td>252 – 726 € millions per year</td>
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<tr>
<td>Spain</td>
<td>121 – 276 € millions per year</td>
<td>145 – 419 € millions per year</td>
<td>303 – 873 € millions per year</td>
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<tr>
<td>UK</td>
<td>410 – 948 € millions per year</td>
<td>156 – 451 € millions per year</td>
<td>326 – 941 € millions per year</td>
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</tbody>
</table>
Coal power generation

- Still a major energy source in Europe
- Around 50 new coal power plants are currently in the pipeline
- Coal power contributes 20% of CO2 emissions of the EU
- Emissions of air pollutants
- Average life span of plant is at least 40 years
Coal and health

Health costs associated with air pollution from coal power plants in Europe per year (mortality + morbidity)

• Health costs of up to 42.8 billion Euros per year
• Eight countries with health costs > 1 billion Euro
• Health experts urge rethink of national and EU energy policy
• Full report: www.env-health.org/unpaidhealthbill/
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