

## 1-1-1 COSTS AND BENEFITS OF RENEWABLE ENERGY TO SOCIETY

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| <b>INTENDED APPLICATION</b>    | Permanent display of web tool on RETD website. The first beta version will be launched in relation to the REWP/RET D/REU workshop March 15, 2007. The will also be promoted at the UN CSD-15.  |
| <b>OVERALL OBJECTIVE</b>       | Provide the basis for developing recommendations for international policies that will contribute to levelling the playing field for renewable energy.  |
| <b>PURPOSE</b>                 | <ul style="list-style-type: none"> <li>■ Estimate the costs and benefits of renewable energy compared to traditional energy sources; and</li> <li>■ Identify improvement possibilities for renewable energy technologies through the learning processes.</li> </ul>  |
| <b>RESULTS</b>                 | <ul style="list-style-type: none"> <li>■ Web-based cost-benefit calculator;</li> <li>■ Report presenting improvement possibilities for renewable energy technologies through the learning process.</li> </ul>  |
| <b>MAIN STAKEHOLDERS</b>       | <ul style="list-style-type: none"> <li>■ Policy makers in charge of shaping energy markets and policies for the promotion of renewable energy in general, including IEA policy analysts;</li> <li>■ Student and scholars.</li> </ul>   |
| <b>BACKGROUND AND APPROACH</b> | <p>It is often highlighted that the benefits of renewable energy and the costs of conventional technologies are not sufficiently represented in energy markets, nor in energy planning and policy making. Many of the benefits of renewables are difficult to monetize and are therefore omitted when investors make decisions on commissioning new energy plants. In addition, the external costs associated with conventional energy production are often excluded, further discriminating against renewable energy. Subsidies provided for conventional energy production, such as for domestic coal, further distort the playing field for renewable energy technologies and make renewable energy comparatively more expensive. In addition, the so-called learning curve effect – an increased deployment of renewable energy coupled with a decrease in generation costs over time – is often ignored or underestimated. This, in combination with the often overlooked potential for local job creation, further hinders the deployment of renewables.</p> <p>The project steps are:</p> <ul style="list-style-type: none"> <li>■ Preparation of a template for comparing energy supply costs;</li> <li>■ Literature survey and consultation with the IEA, relevant IEA implementing agreements and utilities/TSOs, national authorities and relevant research institutes;</li> <li>■ Development of a web-based cost-benefit calculator based on generally accepted values from sources such as ExternE, IEA, RETScreen, and CERl;</li> <li>■ Reporting and dissemination.</li> </ul> |
| <b>ADDED VALUE</b>             | Provide access to more transparent cost-benefit analyses. This will contribute to a common understanding and a broader consensus on how to adequately price the benefits of renewable energy technologies.   |
| <b>STEERING GROUP</b>          | <ul style="list-style-type: none"> <li>■ ExCo member Michael Paunescu, Canada;</li> <li>■ ExCo member Aldo Iacomelli, Italy;</li> <li>■ Wolfram Krewitt, DLR, Germany (awaiting confirmation);</li> <li>■ Jan Hamrin, Center for Resource Solutions, USA (awaiting confirmation)</li> </ul>  |
| <b>BUDGET</b>                  | €120,000   |
| <b>TIME FRAME</b>              | November 2006 – October 2007   |
| <b>IMPLEMENTING BODY</b>       | Ea Energy Analysis, Denmark  |