UNFC Application to Renewable Energy

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Summary

- UNFC – The journey to renewable energy
- From finite to renewable energy resources
- Status of implementation – selected examples
  - Geothermal
  - Wind
Key role of Renewable Energy towards a sustainable future has highlighted a need to harmonize the way in which its potential is reported.

Investors, regulators, governments and consumers need a common comparison framework for both renewable and non-renewable energy resources to assess energy sustainability scenarios at project, company, country, regional or global levels.

Ongoing updates. Geothermal specifications update completed and operational since 25-Oct-22!
Finite energy resources

A project is the level at which a decision is made on whether or not to proceed (i.e. spend money or not.)
A *Project* is the link between the Renewable Energy Source and marketable quantities of Energy Products. A *Project* provides the basis for economic evaluation and decision-making.
UNFC – Geothermal Implementation

Examples around the globe

June 2021
(Based on UNFC-2009 and 2016 geothermal specifications)

SICA’s Energy Ministers Council instructs application of UNFC

10th African Rift Geothermal Conference (ARGeo-C10)
11 to 17 November 2024,
Julius Nyerere International Convention Centre,
Dar es Salaam, Tanzania

Planned 2-day pre-conference UNFC course by Jacobs
UNFC – Wind Implementation
UK Case Study

Summary of quantification in terms of development status

<table>
<thead>
<tr>
<th>Development Status</th>
<th>Low (PJ)</th>
<th>Mid (PJ)</th>
<th>High (PJ)</th>
<th>% of total* (using mid estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>169</td>
<td>217</td>
<td>271</td>
<td>0.1%</td>
</tr>
<tr>
<td>Under construction</td>
<td>192</td>
<td>286</td>
<td>394</td>
<td>0.1%</td>
</tr>
<tr>
<td>Consent granted</td>
<td>635</td>
<td>966</td>
<td>1,371</td>
<td>0.5%</td>
</tr>
<tr>
<td>Early concept</td>
<td>2,588</td>
<td>4,784</td>
<td>7,045</td>
<td>2.5%</td>
</tr>
<tr>
<td>Undeveloped</td>
<td>141,215</td>
<td>184,769</td>
<td>239,643</td>
<td>96.7%</td>
</tr>
</tbody>
</table>

* Rounding error.
Acknowledgements:

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THE VIEWS EXPRESSED ARE THOSE OF THE PRESENTER AND DO NOT NECESSARILY REFLECT THE VIEWS OF THE UNITED NATIONS.

Thank you!

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