

Report from WG 12 (energy) 2014-2017

Mandate

At the working group's meeting in Tokyo in July 2013, the following mandate was approved

- The working group (WG 12) shall review current energy issues and through International Union of Pure and Applied Physics (IUPAP) make briefs available for the global physics community and policy makers as well as the public at large.
- The group meets once or twice a year to review selected topics taking advantage of local experts where the meeting is held.
- The topics considered should include energy supply, carriers, storage and use. Both advanced and low tech systems shall be looked into.

It was agreed to make briefs on selected issues rather than technical reports.

Publications

Drafts for some 15 briefs have been received are or are in the process of being prepared for publication. These include solar energy, wind energy, hydro power, ocean wave energy, ocean tidal energy, geothermal energy, nuclear power, fusion, coal, gas hydrates, biogas, biofuel, bioenergy (solid), energy storage, batteries. Included is a survey paper on the various energy resource estimates.

At the meeting in Oslo, the drafts were discussed and it was agreed to publish them in a series of EnergyPages similar to the Canadian SciencePages (<http://sciencepages.ca/publications/>). Each document will have an ISBN and the key authors will be named on behalf of the group. The typical length of a brief will be 6 pages, that can be printed in paper format.

The briefs are planned to be published in batches of four. The first four briefs in preparation are hydro power, gas hydrates, coal and biofuels. Before publication, the briefs will be peer reviewed. The next batch will cover several topics within bioenergy like biogas, woody biomass, liquid biofuels, etc.

Several members of the group have been involved in the SCOPE Bioenergy assessment. It is published as volume 72 in the SCOPE report series and is available for free download at

<http://bioenfapesp.org/scopebioenergy/index.php>

During 2015 and 2016, the Bioenergy report has been launched at FAPESP in Sao Paulo, EU's energy week in Brussels, and World Bank in Washington DC. A policy brief with focus on bioenergy in Africa and Latin America is about to be finalized and published by the end of 2017.

Challenges.

The group is experiencing a few challenges. One issue copyrights related to infographics. The group does not possess the means to cover the cost for new infographics. The other issue is inactive members or members that do not have time to deliver on assignments. I have had discussions with another member of the group, Sir Chris Llewellyn Smith, and we have decided to bring in some new key people that are better positioned with respect to these issues. Potential new names will be supplied before the next general assembly.