ALCUE NET – WP2: Energy

State of the art of R&D in Renewable Energy in Latin America and the Caribbean

1st phase of the study on NCRE

- 3 month study: mid-November 2013 => mid-February 2014

- 10 participating countries in LAC: Argentina, Barbados (*), Brazil, Chile, Colombia, Costa Rica, Mexico, Panama, Dominican Republic and Uruguay

  (*) Actually it is the Caribbean Science Foundation, NGO based in Barbados, working on 13 countries from the Caribbean

- Energy sources:
  - Solar thermal
  - Solar photovoltaic
  - Wind
  - Bioenergy

Scope of Work

- *Item n°1:* detection of existing national policies and regulatory framework for research activities in the energy sector.
- *Item n°2:* identification of critical mass of researchers and research organisations from both the private and public sectors
- *Item n°3:* detection of existing current cooperation with European counterparts – irrespective of whether funded by the Framework Programme.
- *Item n°4:* identification of approaches, obstacles and good practices for cooperation on energy issues
- *Item n°5:* identification of major programmes, projects, investment, human resources and infrastructures
- *Item n°6:* identification of key actors and stakeholders within research organisations, industry, academia, government and civil society aimed at drawing a picture of the forces in place.
- *Item n°7:* basis for identifying potential areas and common priorities for cooperation, and where EU-LAC network shall be established to enable joint cooperation initiatives and activities

Action plan / approach

- Preliminary basis:
  - Lists of contacts given by the participating countries mid 2013 => actors of R&D in NCRE

- Elaboration of 2 surveys, with different objectives and addresses:
  - 1st survey to countries NCP's, ALCUE NET CP's and Innovation and/or Investigation Agencies (if relevant) to get a global overview of the sector in each country
  - 2nd survey to the 300 contacts given in the basis, to get details on their R &D activity

1st survey: global overview by country

- Excel flowsheet asking for:
  - National policies supporting NCRE
  - National policies supporting R&D (including private inversions)
  - Countries priorities related to NCRE
  - National investment in R&D (% of the GDP)
  - Number of researchers: overall / working on NCRE
  - Existing cooperation with European partners in NCRE (involved institutions)
  - Interests towards cooperation with the EU in NCRE (potential areas & priorities)

2nd survey: getting details on the actors

- 300 contacts in 10 countries (no uniform distribution)
- Excel flowsheet asking for:
  - Contact general data: name of the institution, type, responsible (contact person), phone, email, institution website
  - Info on the research projects: energy source, energy use, main research lines
  - Financial and human resources: size of the research team, available funds and source, national counterpart (if any)
  - On cooperation: existing cooperation with EU partners (institutions), interests towards future cooperation with the EU

Balance on the received answers

Country	1st survey	2nd survey (answer rate)
Argentina	Phone conference on 19/2/14 => source: report on RE	50 / 101 (50%)
Barbados => CSF	Received on 28/2/14	3 / 20 (15%)
Brazil	Received on 6/3/14	6 / 14 (43%)
Chile	OK	5 / 41 (12%)
Colombia	OK	4 / 10 (40%)
Costa Rica	Ok	7 / 19 (37%)
Mexico	OK	4 / 24 (17%)
Panama	OK	2 / 15 (13%)
Dominican Republic	?	No contacts given
Uruguay	Specific web sources given	22 / 54 (41%)

- Possible reasons to explain discrepancies in the answers: period of the year of the study, lack of info on the confidentiality of the results, redundancy with other studies?

Conclusions 1: global overview

- Great dynamism of the sector
- Existence in every country of national policies supporting the development of NCRE and their integration in the energy matrix (to be confirmed for CSF partners and Dom. Rep.).
- Most of these policies were voted recently and are to be completed.

- Existence in every country of national funds supporting STI and/or R&D. Sometimes there is a specific fund for Energy projects.
- STI and R&D are seen as a great factor for development and competitiveness.
- Around 0.5% of the GDP is invested in R&D (ranging from 0.18% to 1.16%) – No data available for CSF and Dom. Rep. Source: World Bank
- Research is mainly carried out by Universities, financed by public funds.
- Increasing support to private investment in research, by tax incentives for instance.

Conclusions 2: R&D actors

- All participating countries have research activities in the four selected NCRE: solar thermal, solar photovoltaic, wind and biomass (especially biofuels) – no data available for Dom. Rep.

⇒ We can start creating virtual networks linking institutions working on similar subjects. Those networks should be dynamic ones to integrate institutions not included in the survey or that did not answer yet.

- Increasing activity on geothermal power, and at a smaller scale on wave energy and small-scale hydro.
- Existing cooperation of research centers with EU partners:
  - Cooperation with Spain and Portugal via CYTED networks. All participating countries (except CSF partners) are active members of CYTED.
  - With other EU partners, mainly in countries that have a STI cooperation agreement with the EU.
  - Great potential for further development.

Preparation of the 2nd step of the study

- Preliminary tasks:
  - Complete the 1st phase study with the additional information to be received from the participating countries and R&D actors.
  - Getting equivalent info from the EU to be able to do the matching (to be provided by DLR, Germany).
- Objectives of the 2nd phase:
  - Provide necessary background information to help support the development of a cooperation strategy in STI in energy between the EU and LAC.
  - Provide the basis for establishing an operational EU-LAC network in order to develop joint initiatives in energy STI.

Towards an operational EU-LAC network to develop joint initiatives in energy STI

- How do we get there?
- Supporting the creation of Technogical Platforms in the participating LAC countries inspired from the ETP
  - Putting together all the key actors and stakeholders per energy field
  - Concentration of actors in a single representative organization to facilitate EU-LAC dialogue.
  - Useful examples: CyTED networks, BioTecSur platform, ETP's

Thank you for your attention!

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