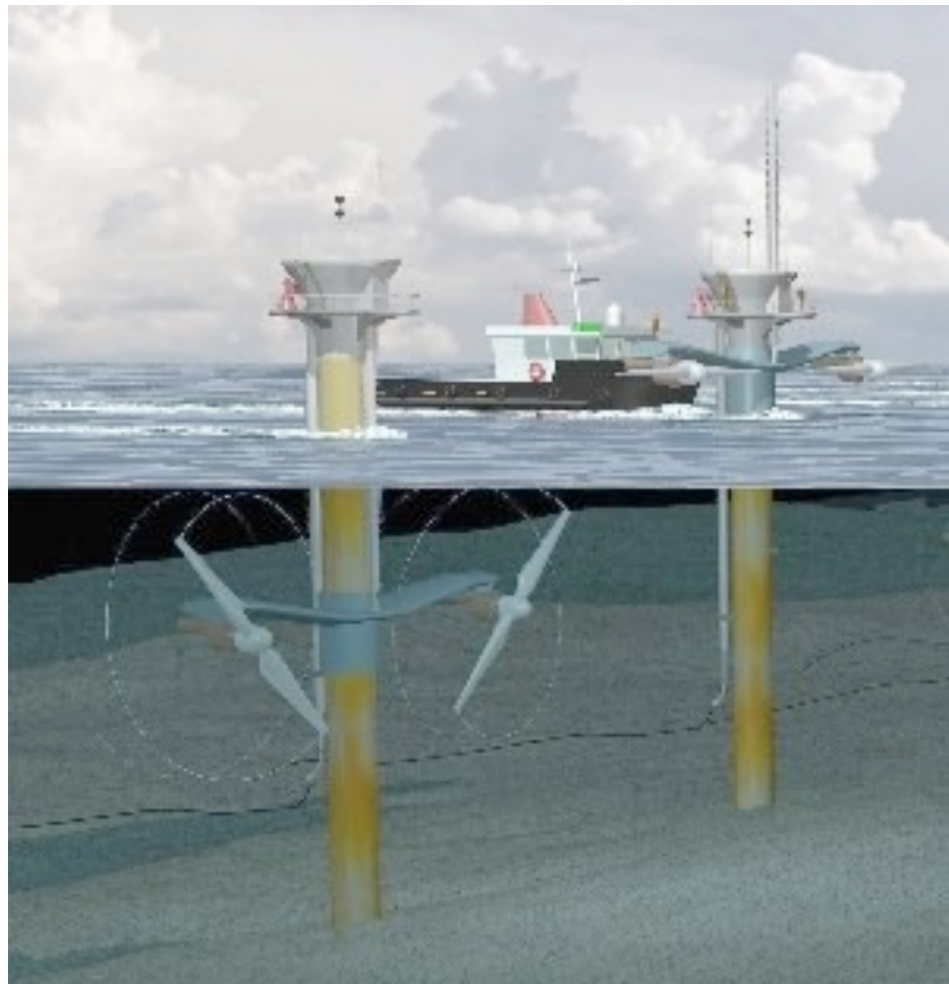


New and Renewable Energy Technology: Two APEC Projects Concept Notes



Proposed by Russia for the 3rd 2011 project approval session

Prepared by the Ministry of Energy of the Russian Federation in collaboration with the Higher School of Economics (National Research University, Moscow)

Message from APEC Energy Ministers (EMM-9, Fukui, Japan 2010)

“**Improving energy efficiency** is one of the quickest, greenest and most cost-effective ways to address energy security, economic growth and climate change challenges at the same time.”

“**Cleaner energy supply** also boosts both sustainable development and energy security.”

“We direct the EWG and its subsidiary bodies to continue their important contributions to formulating and implementing the **APEC Growth Strategy and its sustainable growth pillar.**”

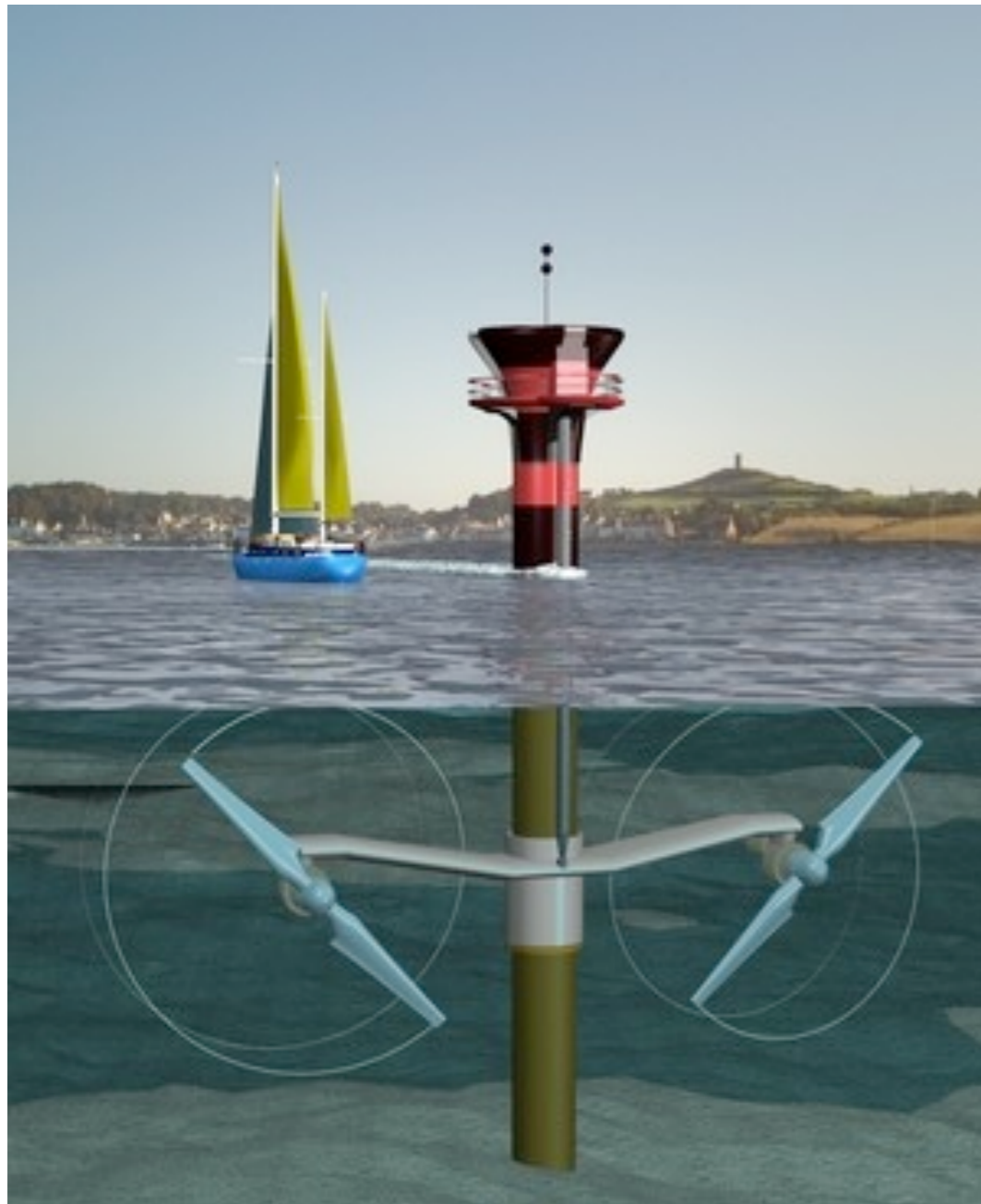
Background

Project 1: *Prospects for Marine Current Energy Generation in APEC Region*

Project 2: *Piloting smart/micro grid projects for insular and remote localities in APEC economies*

- Both projects were presented at EWG-41 (Vancouver, 9-13 May 2011)
- Members were generally supportive, including EGNRET
- Russia was asked to include Project 2 (micro-grid) in the Energy Smart Communities Initiative, Smart Grid pillar
- Concept Notes developed in line with current APEC practices

Prospects for Marine Current Energy Generation in APEC Region: Rationale (1)



What's the purpose?

To advance the understanding of opportunities for marine energy production and, in particular, marine current energy

Why marine and current energy?

- Marine and ocean waters offer huge potential of clean renewable energy that can be harnessed from tides, waves, currents and other sources

Prospects for Marine Current Energy Generation in APEC Region: Rationale (2)

- Marine currents are estimated to be relatively stable but less explored source of energy compared to other renewables
- Early experience of deploying related technology is dispersed, awareness of successful deployment models is relatively low



Prospects for Marine Current Energy Generation in APEC Region: Key activity

Two-day conference (April/May 2012) to bring together operators/developers of successful marine energy generating facilities and representatives of stakeholders.

The issues to be discussed include (but are not limited to):

- technologies available;
- successful deployment models;
- assessment of the potential of marine energy within a larger economy context;
- pre-requisites for wider usage and commercial development;
- trade and investment promotion measures.

Prospects for Marine Current Energy Generation in APEC Region: Expected output

Policymakers



Private sector



Practical
knowledge
resource



Consumers



R & D entities



**Deployment
models**

Piloting smart/micro grid projects for insular and remote localities in APEC economies: Rationale (1)

What's the purpose?

To consider micro grid as a special case of smart grid that is designed to maximize the economic and environmental effect of deployment of the smart grid technology in insular and remote localities



Why insular and remote localities?

- Insular, remote and geographically isolated localities are common in most of APEC economies

Piloting smart/micro grid projects for insular and remote localities in APEC economies: Rationale (2)



- Insular and remote localities are likely to experience bigger challenges in securing reliable and efficient energy supply
- Efficient and clean energy solutions for these areas, including smart grid technology, typically require a tailored approach

Piloting smart/micro grid projects for insular and remote localities in APEC economies: Project timeline

- *January-May 2012* - Compilation of information, case studies and analysis by a small group of volunteering experts from APEC member economies
- *May/June 2012* - Workshop to engage the experts and stakeholders in an open discussion of the topic. The tentative location of the event is Vladivostok, Russia. The program may include a special session/site visit to overview a smart grid local cluster project on the Russky Island
- *June-October 2012* - Dissemination of the outcome of the first two stages of the project

Piloting smart/micro grid projects for insular and remote localities in APEC economies:

Expected output



Menu of options and/or toolkits for piloting smart grid and micro grid projects in remote localities of the interested APEC economies

Co-sponsors are welcome!

Thank you for your attention!

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