Wadden Sea Forum

13th Meeting

Fanø, 18-19 November 2008

Agenda Item:	**8**
Subject:	**TOR study energy**
Document Nr.	**WSF 13-8-1**
Date:	**12 November 2008**
Submitted by:	**WG EII**

PROPOSAL: According to the decision of WSF 12, to commission an inventory and analysis of all existing and currently being planned power plants in the Wadden Sea Region and the EEZs of Denmark, Germany and The Netherlands, draft TOR have been elaborated by the WSF WG EII, taking into consideration comments from the WSF Steering Committee.

The meeting is invited to discuss the document and to decide upon the proposal.

INVENTORY AND ANALYSIS OF IMPACTS OF POWER PLANTS IN THE WADDEN SEA REGION

TERMS OF REFERENCE

1. Introduction

The Wadden Sea Forum (WSF) is an independent platform of stakeholder organisations in the international Wadden Sea Region. The central goal of the WSF is to contribute to sustainable development in the Wadden Sea Region. As a first step, WSF has elaborated sustainability objectives and general and sector-specific strategies for achieving these objectives. These have been laid down in the WSF final report "Breaking the Ice".

The WSF working group "Energy/Industry/Infrastructure" is dealing with the development and its impacts in this field. An particular interest is laid on planning and development of energy supplying facilities, with a particular interest on off-shore wind energy, and the ecological and economic consequences. At the 12th Wadden Sea Forum meeting (June 2008) it was agreed to commission an inventory and analysis of all existing plants and developments in the near future.

2. Overall Objectives

The overall objectives of the study are:

I. Inventory and analysis of all existing and being substantiated in an official planning process power plants in the Wadden Sea Region and the southern North Sea EEZs of Denmark, Germany and The Netherlands.

II. Evaluation and assessment of the potential impacts and economic consequences of the energy plants and related facilities.

III. An assessment of the proportion of installed renewable energy within the Wadden Sea Region in the view of the development of a sustainable energy supply.

3. Tasks

(1) Inventory and description of all existing power plants as well as plants under construction and which are in an official planning process in the Wadden Sea Region. The inventory refers to industrial plants for electricity production and does not include single wind turbines, solar systems of households and combined heat and power units (CHP) of municipalities. The description should entail details about location, capacity and technical specialties.
(2) Inventory and description of off-shore wind parks in the Wadden Sea Region and the southern North Sea EEZs of Denmark, Germany and The Netherlands. Also wind parks under construction, approved and currently being planned should be part of the inventory. The description should entail details about location, size, number and type of turbines, installed capacity and related facilities like transformer stations.
(3) Description of regularly maintenance activities related to the operation of the power pants and wind parks.
(4) Evaluation and assessment of the potential impacts and economic consequences of power plants and wind parks. This encompasses economic developments and effects on different sectors like shipping, harbors, infrastructure and fisheries.
(5) The assessment should describe the effects on the southern North Sea and Wadden Sea region as sum of all installations including consequences of energy transport systems. The assessment should also include statements about the sustainability of the installations and the general effects on the environment.
(6) An assessment of the installed renewable energy capacity and of the consumption within the region as proportion of all installed capacity. This should be done in the view of the development and perspective of a sustainable energy supply.

4. Time frame

The work must be finished before the WSF-14 meeting in May/June 2009.

5. Organization and Reporting

The contractor shall deliver a report in English. The data section of the report shall be structured in such a way that the information can be easily accessed and also be used for the new Quality Status Report. Furthermore, the information delivered should fit in the system of the sustainability indicators, developed by the WSF working group ICZM. The feasibility and details have to be discussed in a start up meeting with the consultant, the WSF secretariat and responsible people of the working groups.
The report shall encompass an Executive Summary which includes the conclusions of the study. The conclusions shall address the tasks referred to in the terms of reference.