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Offshore Renewables

ECONOMIC DECISION FACTORS IN SITE SELECTION FOR OFFSHORE RENEWABLE ENERGY PROJECTS

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OUTLINE

- Introduction
- Multi-criteria analysis
- Economic assessment of offshore renewables
- Site selection using economic criteria
- Conclusions

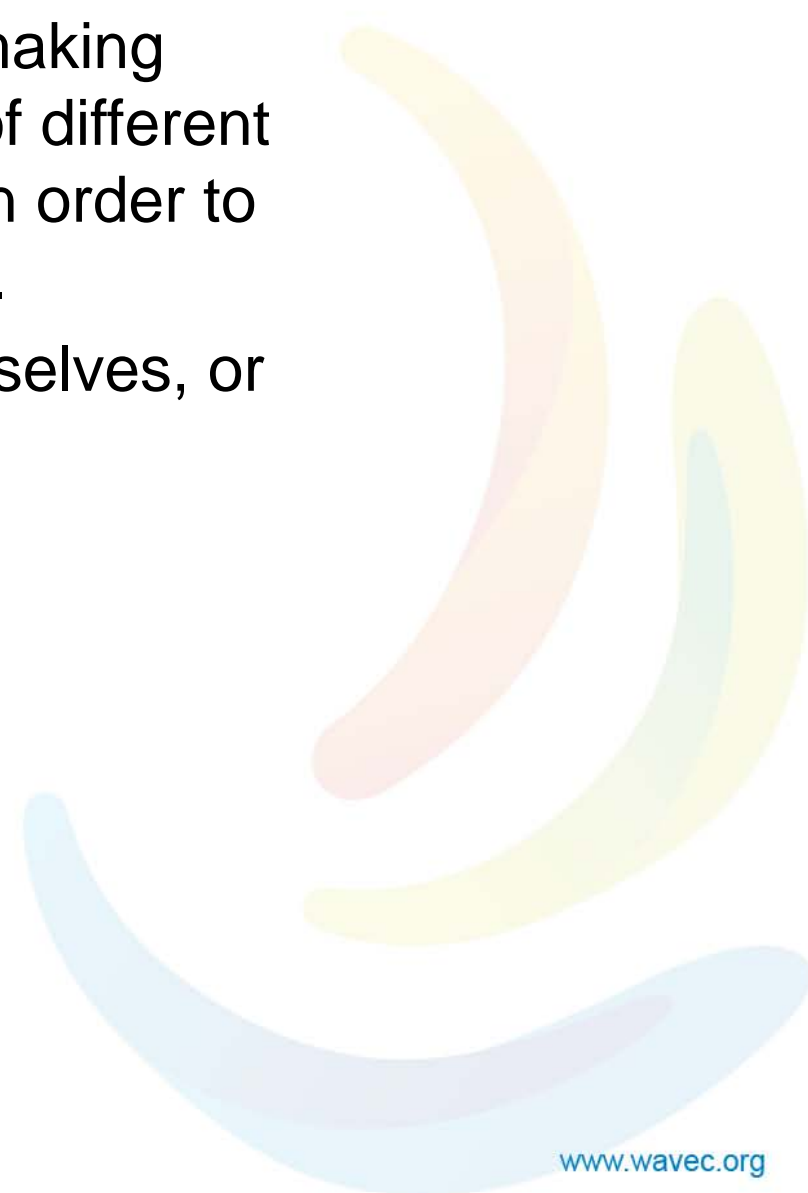


INTRODUCTION

- Site Selection of offshore renewable energy projects is a fundamental aspect of its development
- It is dependent on the requisites of ORE projects, but also on the existing activities in the area that may impact its operation or invalidate its construction.
 - Wide range of stakeholders will be affected and will have different objectives: complex decision-making process
 - Project developers objectives are driven by economic factors
- Multi-criteria analysis (MCA) is an often used valuable technique in site selection, weighting energy resource and technical and non-technical constraints

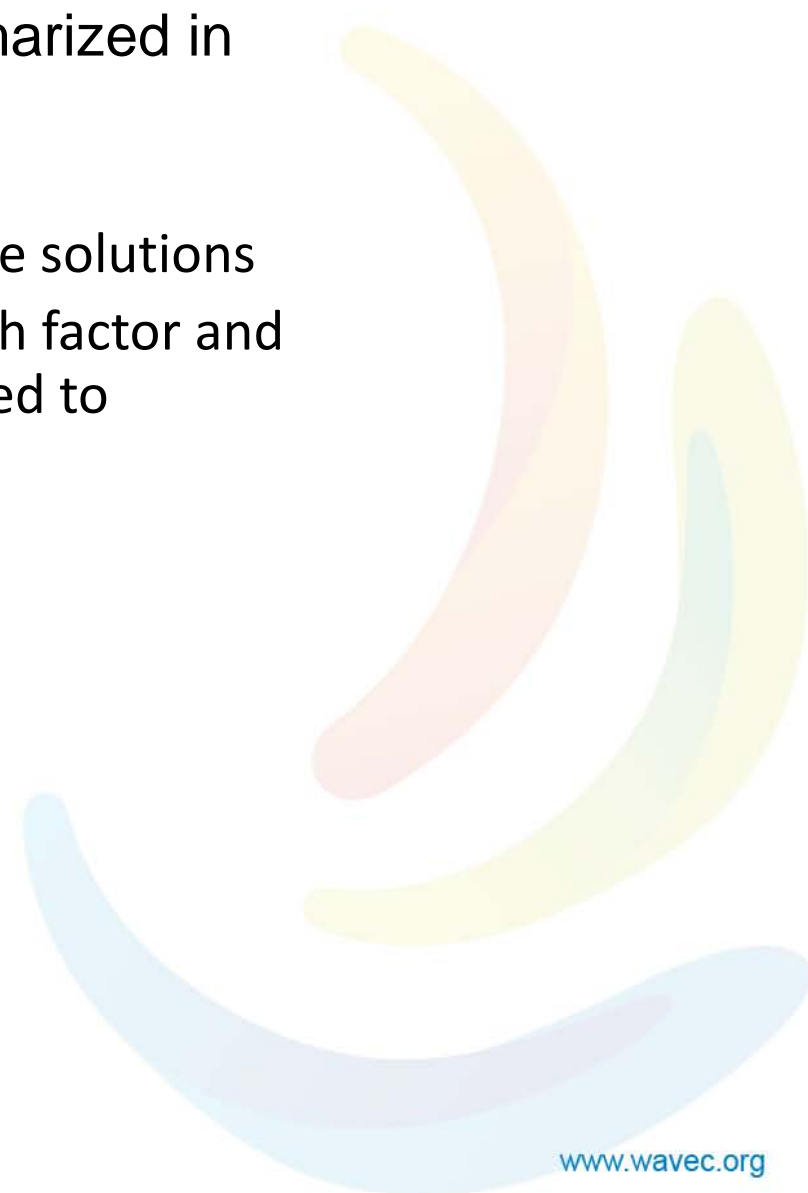
MULTI-CRITERIA ANALYSIS

- It is a technique used to aid in the decision making process by ranking and/or selecting a set of different options according to different parameters in order to achieve an objective, or a set of objectives.
- Objectives may be conflicting among themselves, or represent a trade-off system.



MULTI-CRITERIA ANALYSIS

- The decision process using MCA can be summarized in the following steps:
 - Identification of the problem to be solved
 - Identification the factors that affect the possible solutions
 - Definition of the set of possible options for each factor and determination of the resulting criteria to be used to compare the options.
 - Analysis of the choices



ECONOMIC ASSESSMENT OF OFFSHORE RENEWABLES



SITE SELECTION USING ECONOMIC CRITERIA

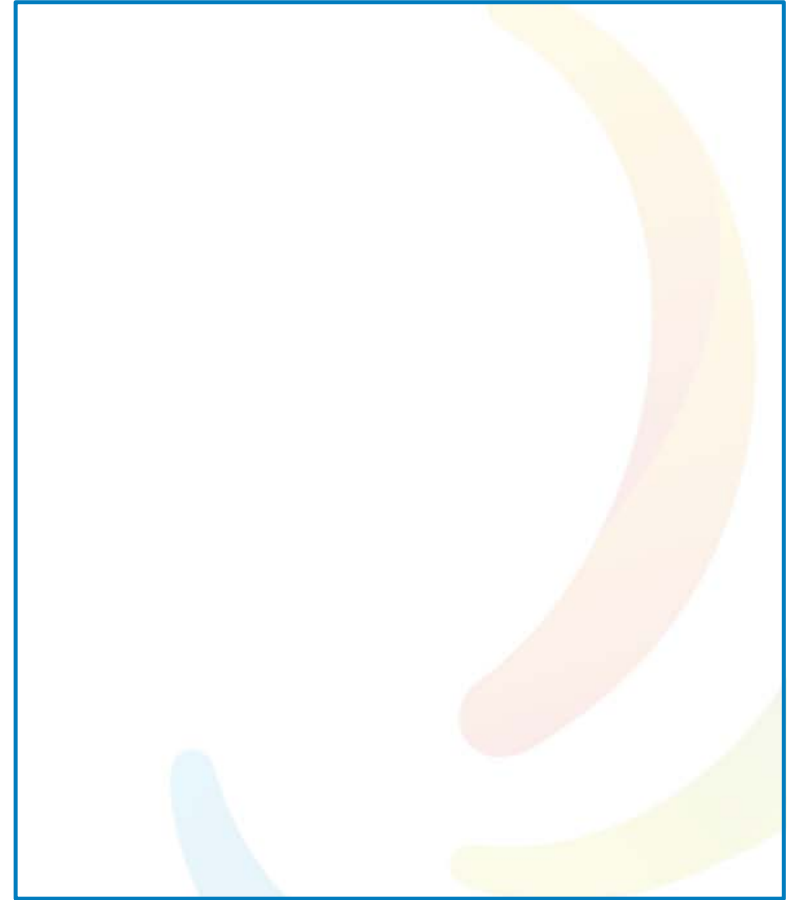


CONCLUSIONS











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