

SEA ROLE IN ENERGY PLANNING TOWARDS THE MATCHING OF RENEWABLE SOURCES AND DEMAND

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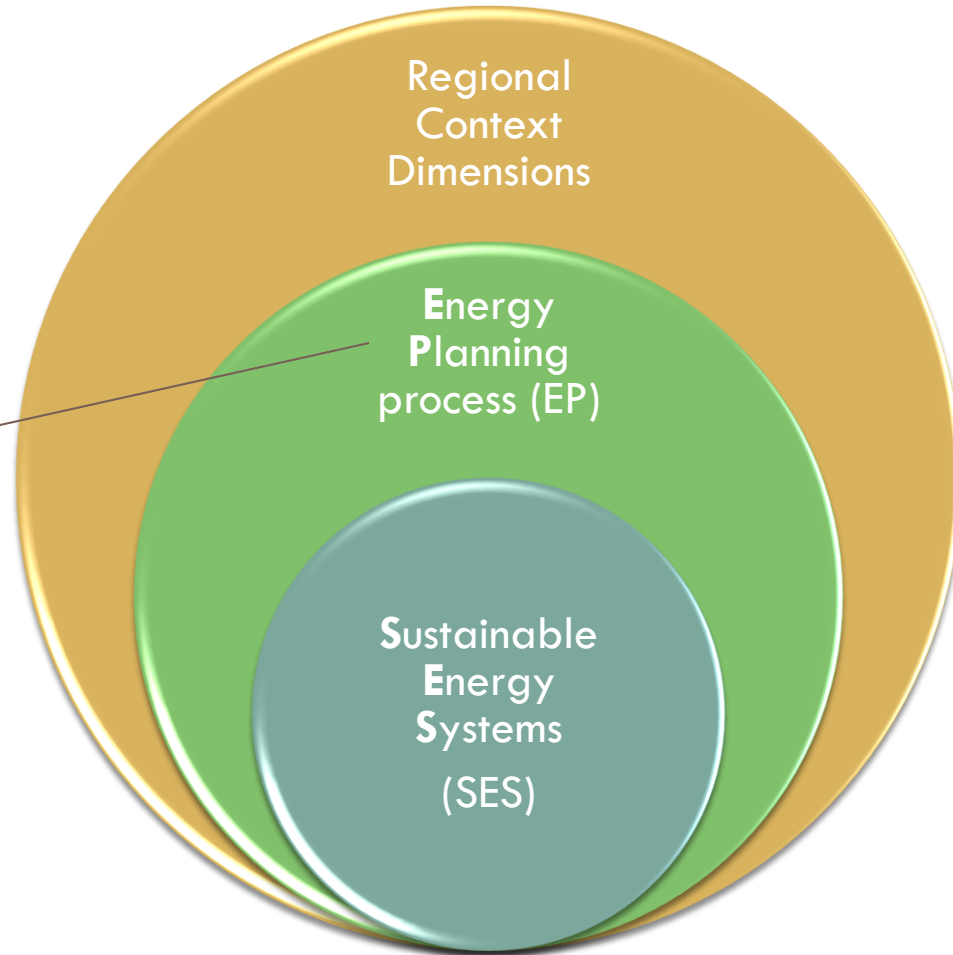
Maria do Rosário Partidário - Instituto Superior Técnico

Introduction

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Focus

Holistic EP by integrating
SEA in the process,
contributing for SES.



Energy Planning – current aspects

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- Very centralized, mostly based on electricity systems
- Primarily a technical-economical planning
- Fragmented vision and limited results
- Renewables and decentralized approach respond to global concerns
- Critical at local level and specially for isolated contexts (islands)
- Challenges regarding the adequacy of energy systems

Introducing SEA (I)

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□ Why?

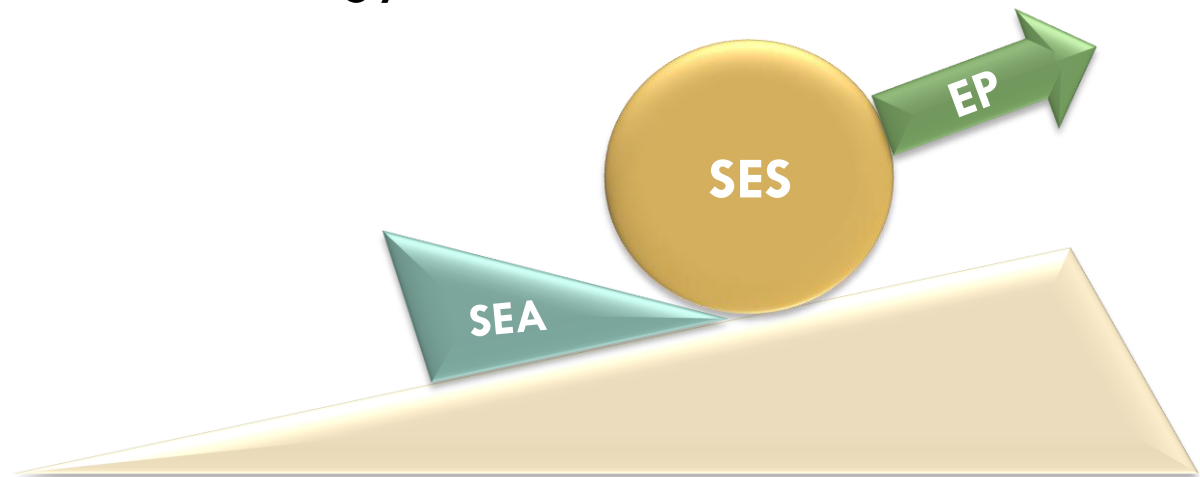
- Helps structuring the problem – use of strategic elements¹ for the establishment of a comprehensive framework
- Supports the planning process as an on-going process - monitoring the direction followed , identifying windows of opportunities and adapting to changing circumstances

¹ Partidário, M.R., *Strategic Environmental Assessment Good Practice Guidance - methodological guidance*, ed. Agência Portuguesa do Ambiente 2007, Lisbon.

Introducing SEA (II)

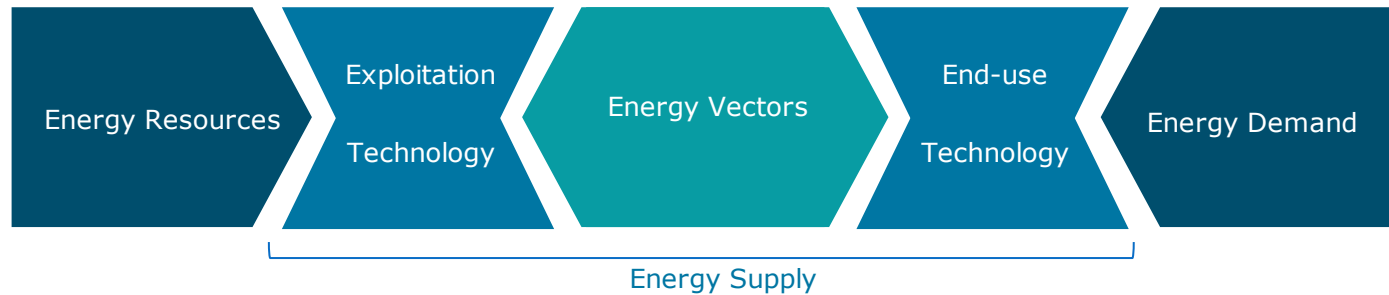
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- Contribution for SES?
 - ▣ Sustainability tool
 - ▣ Integration of different planning dimensions giving the transversal energy issue
 - ▣ Goes beyond a simple assessment of the planning results
 - ▣ Facilitator for the energy transition



Energy Systems

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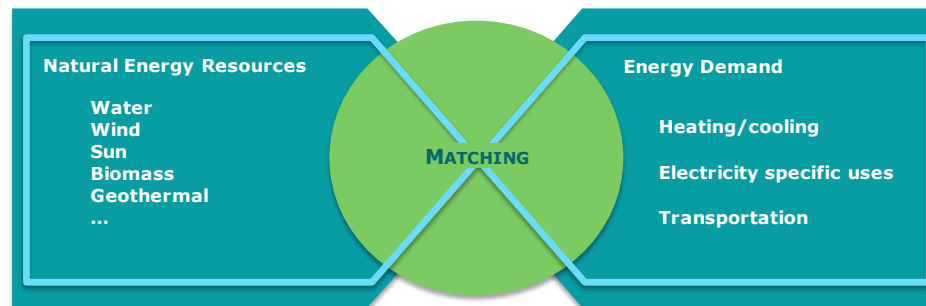


- Holistic vision of the system, from the natural resources (beginning of the supply chain) to the useful energy (energy service).
- Need to thinking along the energy chain, constrained by the natural conditions at one edge and the energy services required at the other edge.

Challenges to Energy planning

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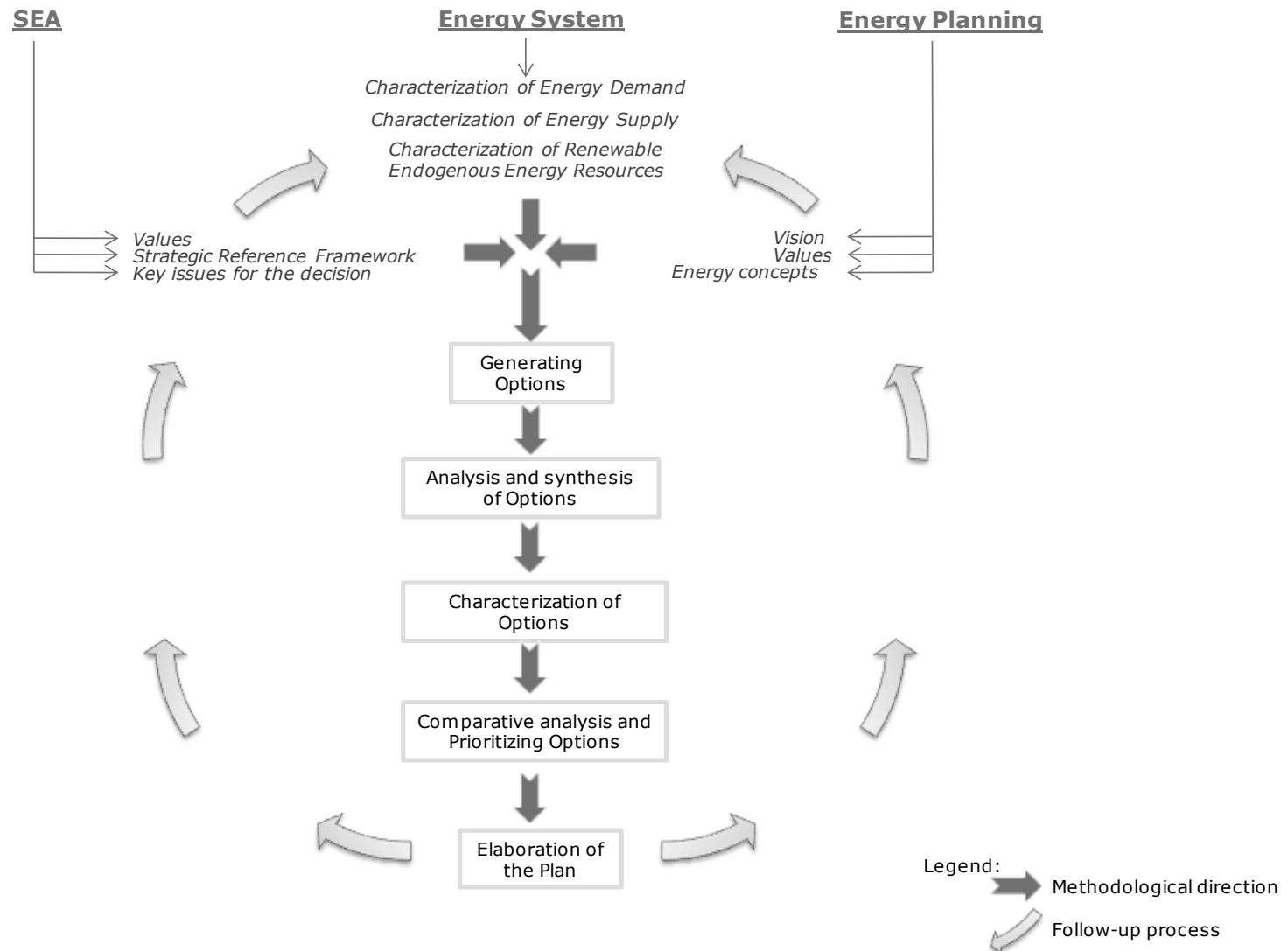
- Local renewable energy resources as a condition for sustainable energy
- Matching the energy demand balancing quantity and quality of energy
- SEA support to enhance the process, informing about the options and achieving better options bearing in mind the local/regional values.



Preliminary Results (I)

Draft of a planning methodology

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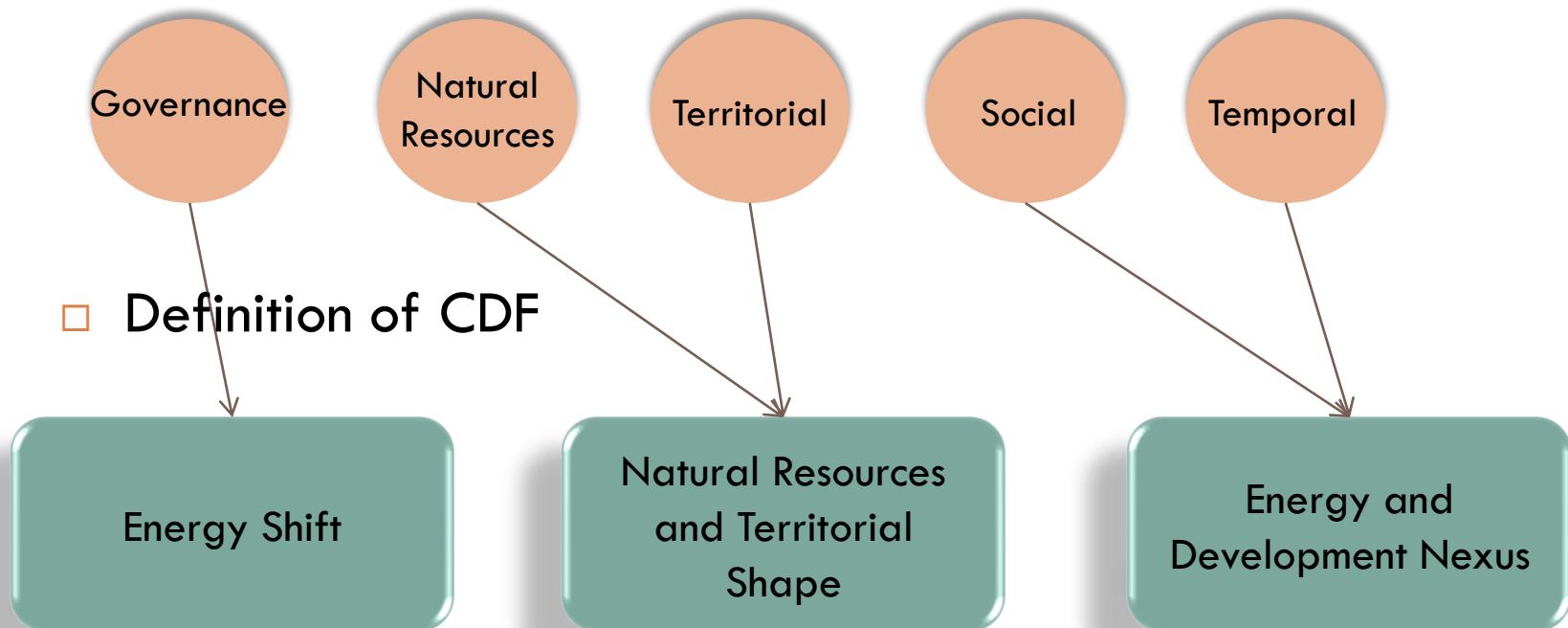


Preliminary Results (II)

Definition of the CDF

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- Identification of strategic issues for energy planning
- Identification of energy planning related dimensions



Contribution of SEA to the EP process

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- Broadening the scope of EP;
- In practice using the CDF will:
 - ▣ Identifying risks and opportunities in energy terms for the island/region;
 - ▣ Enhancing the development of energy options for the island/region;
 - ▣ Defining adequate criteria and indicators for option's assessment.

THANK YOU FOR YOUR ATTENTION

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