

# *Os elementos de prospectiva na avaliação de tecnologia*

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# Objectivos da análise prospectiva

- Foresight does not set out to predict the future.
- But on the basis of a thorough understanding and analysis of the subject in its broadest perspective – and an awareness of different ways in which the future may develop – it is possible to identify a range of possible outcomes.
- The purpose of the foresight work is to assist decision makers to understand how the decisions they make today might affect the future.

# Definição:

- Foresight is a process by which one comes to a fuller understanding of the forces shaping the long-term future which should be taken into account in policy formulation, planning and decision making (Joseph Coates, 1985)

# Métodos de prospectiva

- **Qualitative**
  - Backcasting
  - Brainstorming
  - Citizen panels
  - Scenarios
  - SWOT
  
- **Quantitative**
  - Benchmarking
  - Modelling
  - Patent and bibliometric analysis
  - Impact analysis
  
- **Semi-quantitative**
  - Delphi
  - Multi-criteria analysis
  - Quantitative scenarios
  - Roadmapping
  - Stakeholder analysis

# Gerações de prospectiva (L. Georghiou, 2001)

- **1st generation** – technology forecasting activities. Analysis driven by the internal dynamics of technology
- **2nd generation** – technology contributes to and is influenced from markets
- **3rd generation** – inclusion of social dimension: social actors and institutional arrangements
- **4th generation** – role in the science and innovation system. Organisations sponsor and/or conduct exercises
- **5th generation** – programmes and exercises combined with elements of strategic decision-making

# A prospectiva na avaliação de tecnologia

- Increasing understanding and changing mindsets about challenges and future opportunities
- Providing anticipatory intelligence to system actors as to the main directions, agents and rapidity of change
- Building visions of the future that can help actors recognise paths of development and the choices that help determine these

# Processo de Avaliação de Tecnologia

- Increasing the number and involvement of system actors in decision-making
- Accessing wider pools of knowledge
- Achieving more democratic legitimacy in the policy process
- Extending the range of types of actor participating in decision making relating to STI issues