

# Science, Innovation, and Partnerships for Sustainability Solutions

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*Panel: International and National R&D Directions,  
What's needed for S&T for Sustainability*

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*UNITED NATIONS CONFERENCE ON SUSTAINABLE DEVELOPMENT (RIO + 20),  
Rio de Janeiro, 20-22 June 2012*

**Rio+20 should accelerate and broaden the world-wide transition towards a green economy that promotes sustainable development and contributes to poverty eradication around the world.**

Contribution by the European Union and its Member States

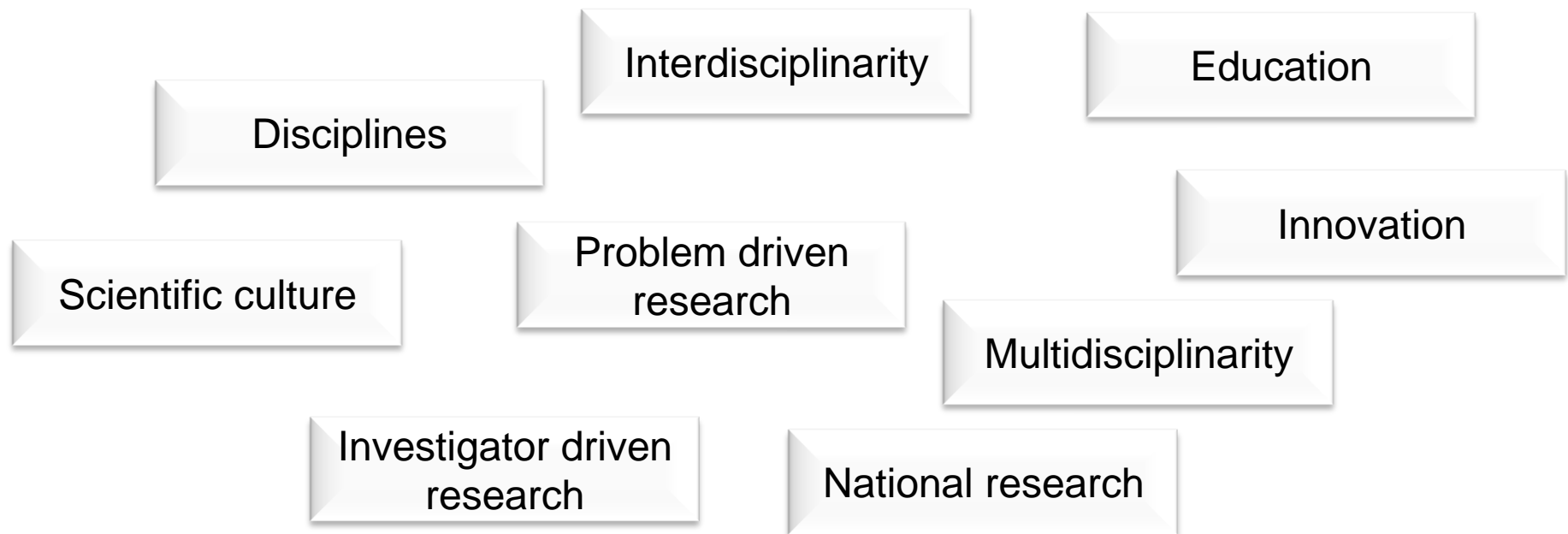
# Issues

“ **Green economy** is more than the sum of existing commitments: it has the potential to lead us to a new development paradigm and a **new business model** where **growth, development and environment** are seen as mutually reinforcing each other.

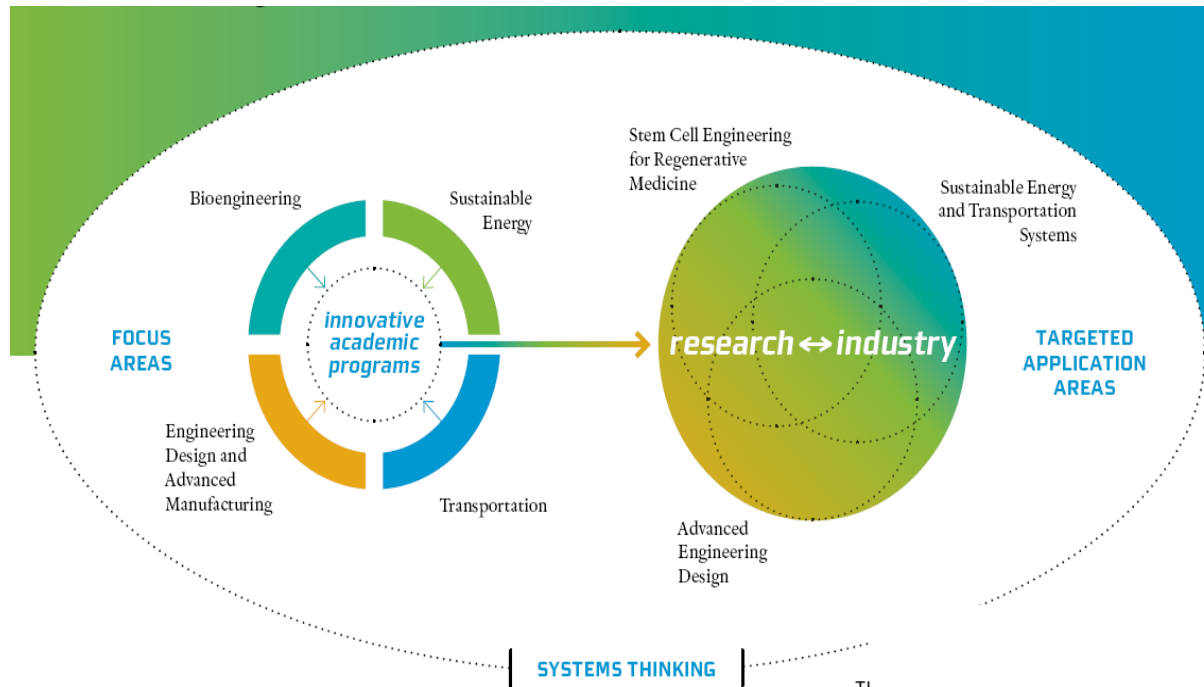
Increasing **resource efficiency**, promoting **sustainable consumption** and production patterns, tackling **climate change**, protecting **biodiversity**, combating **desertification**, reducing **pollution** as well as using and managing **natural resources** and **ecosystems** in a sustainable and **socially responsible** manner are both requirements and key vehicles in ensuring a just **transition** to a green economy.”

# S&T needs and Barriers

Research is needed to **understand** the **character**, the **mechanisms** and the **requirements** of the **institutional transition** in **society**, **culture**, **technology**, **economy**, **regulation**, and **policy** necessary to allow for sustainable development – **Requires Demonstrations.**

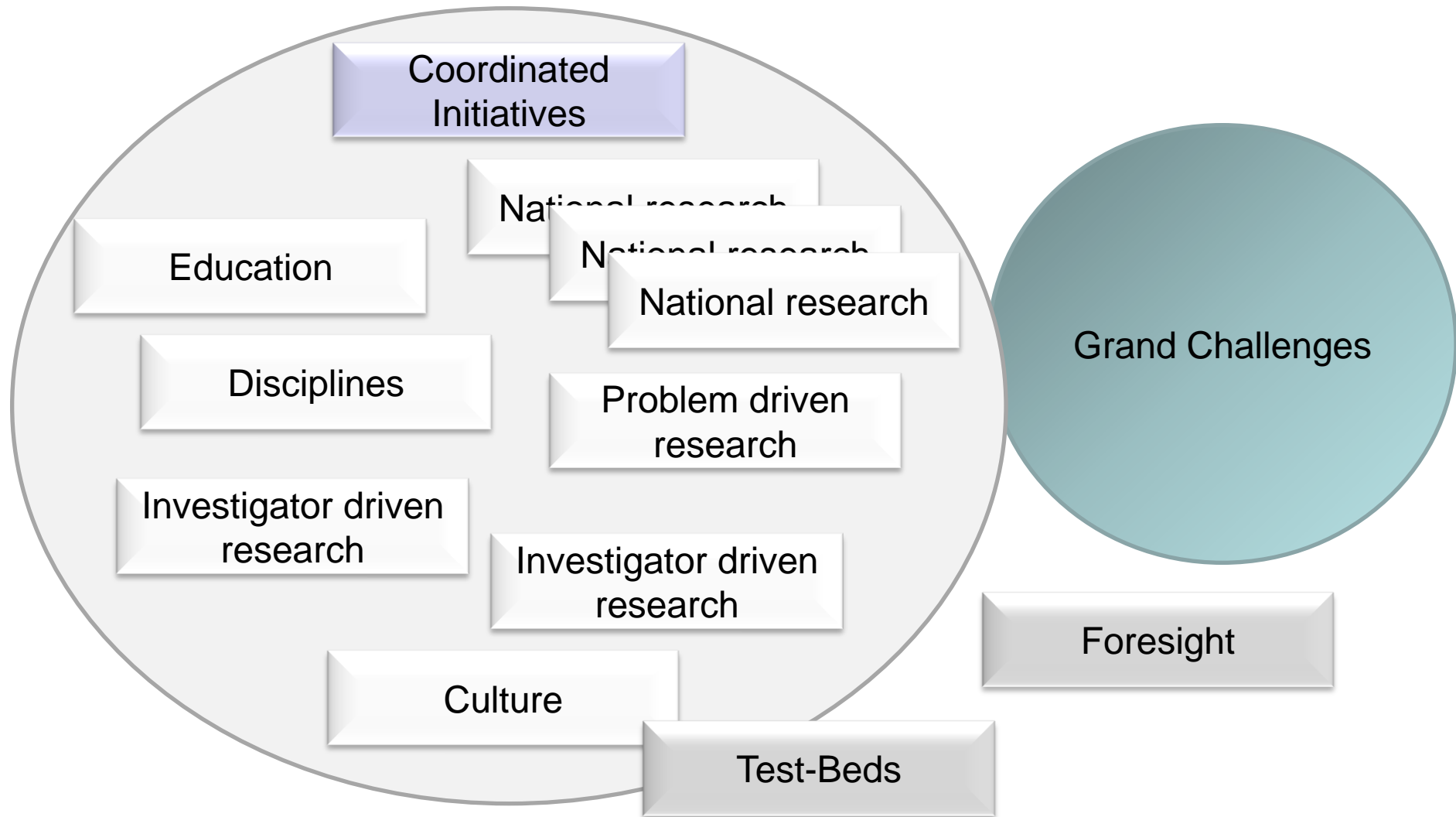


**Engineering systems focus:** gives emphasis to **complex systems** that not only have critical **technological components**, but also have significant **economical** and **socio-technical level interactions**, going beyond traditionally defined engineering disciplines.



**10** Portuguese Universities,  
**All 5** Schools within MIT,  
**4** Doctoral programs  
**1** MBA,  
**3** Master's of Business Engineering and Master's of Science programs.  
**Over 500** student from 44 countries

# New Directions



# Green Islands Project

MIT Portugal



- Three Phase Research Strategy
  - Novel Research Topics Focused on the Integration of New Supply and Demand Technologies, including Storage, Transportation, Efficiency
- Sustainable Energy Systems Full Scale Testbeds

