

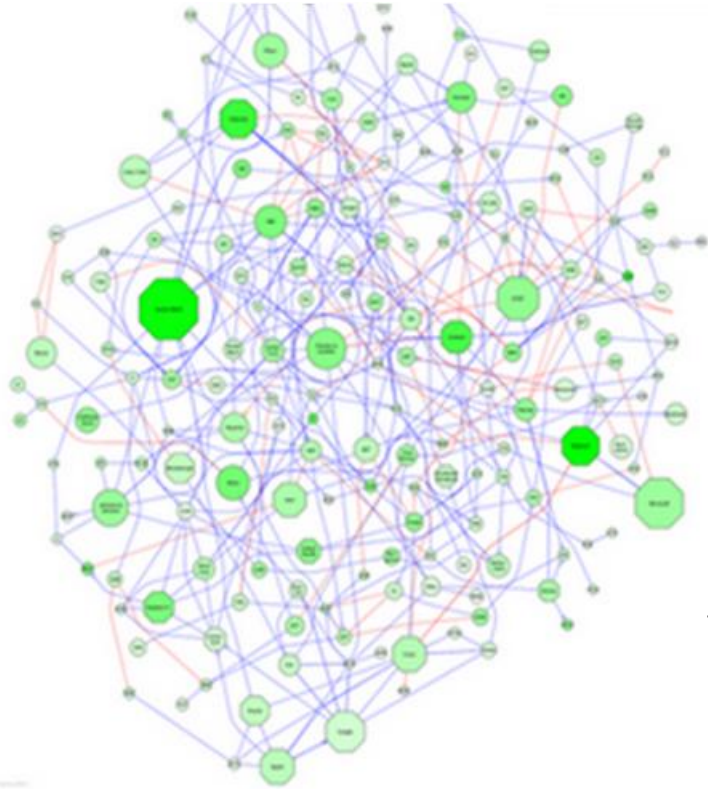


4th INTERNATIONAL CONFERENCE

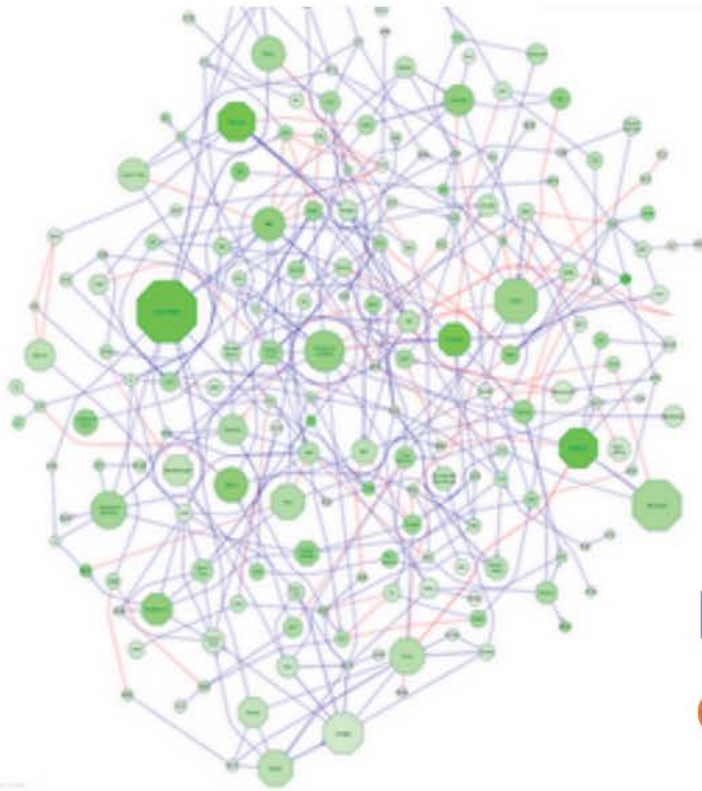
Electrical Interconnection of the Caribbean: Technical, Environmental and Economic Aspects

May 5-7, 2011

Universidad del Turabo, Gurabo



How are we going to supply the world with **renewable energy**?



Available **wind, solar, geothermal, oceanic and biomass** resources offer the opportunities for **transnational partnerships** to establish a **network of diversified green energy** sources for sustainable **development**.

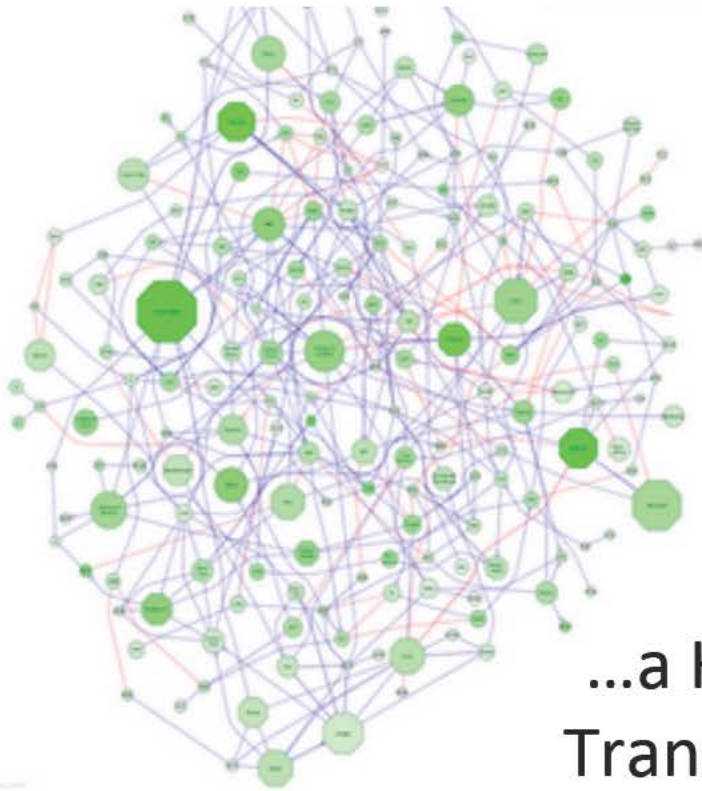
A **Global Grid** is on the horizon...



An interconnected grid is more **efficient** and supply is more **reliable**...



Southeast Asia's Planned Grid Interconnection across China, Cambodia, Vietnam, Myanmar, Thailand, Malaysia, Singapore, Indonesia and The Philippines will also connect with Australia.



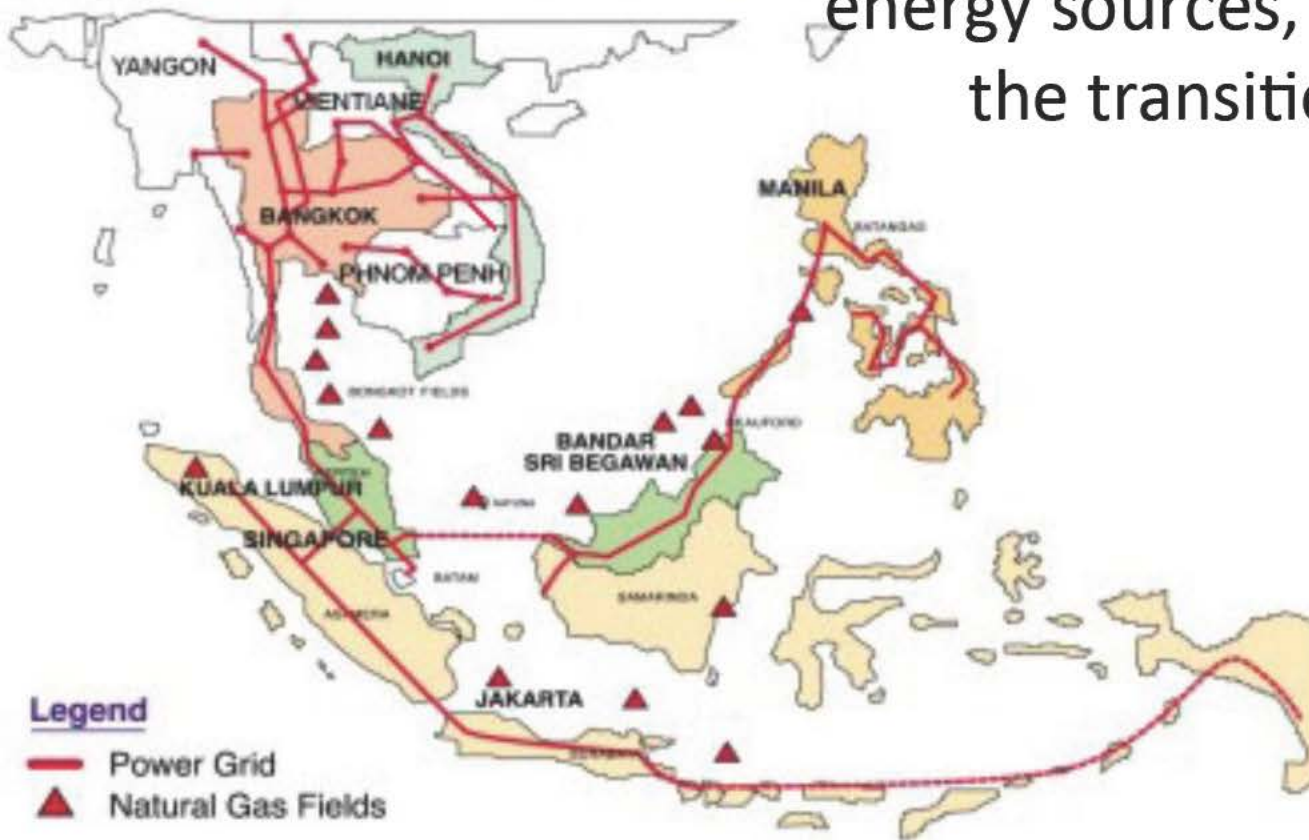
The **SuperGrid** (a.k.a **Global Green Grid**)

...a High Voltage Direct Current (HVDC) Transmission System, will only be fed by renewable energy sources

The SuperGrid (a.k.a Global Green Grid)...

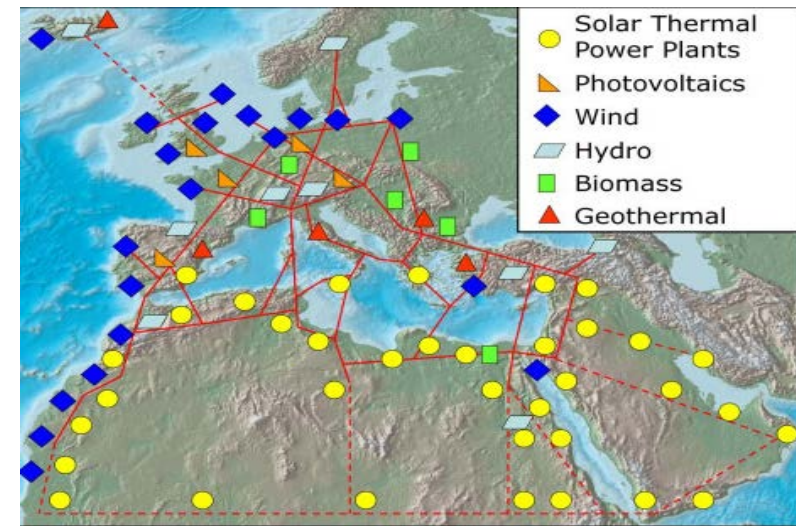
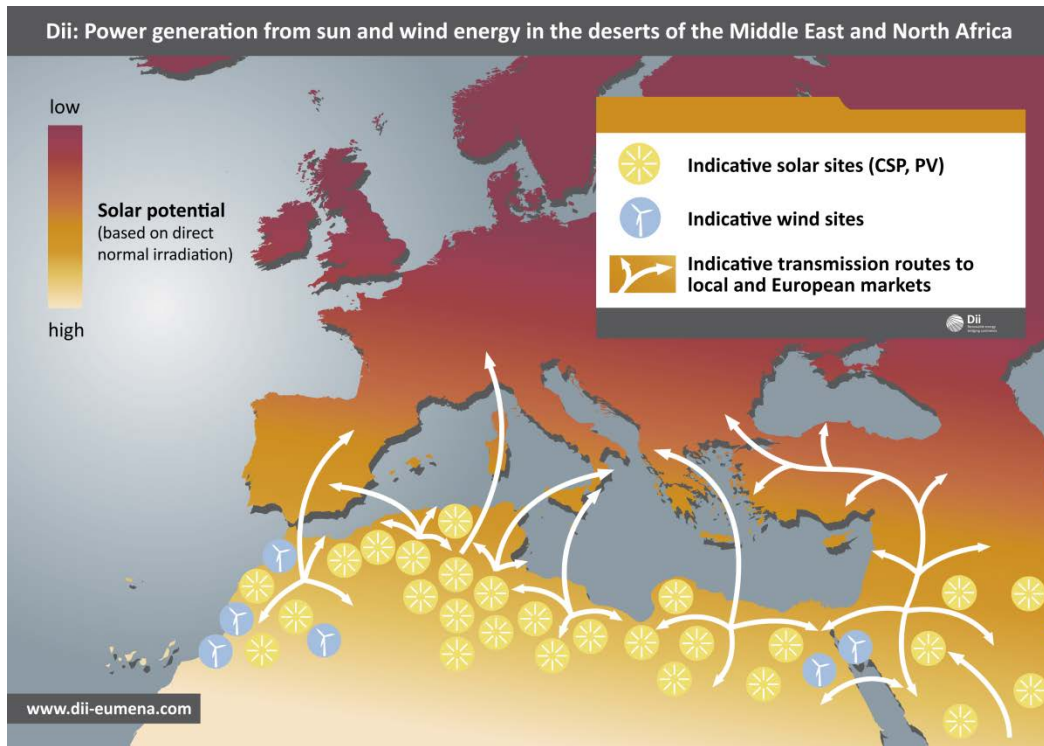
will only be fed by renewable energy sources, but natural gas is the transition's enabler

This infrastructure, to consist of a HVDC power line and a natural gas pipeline, will be a conduit for power from solar, geothermal and wind sources, as well as natural gas, hydrogen and synthetic fuels.



Southeast Asia's Planned Grid – Natural Gas

Regional and inter-regional plans are underway...



EU-MENA Interconnection Grid and Renewable Energy Supply to Markets.

Site overlays by energy source are being developed

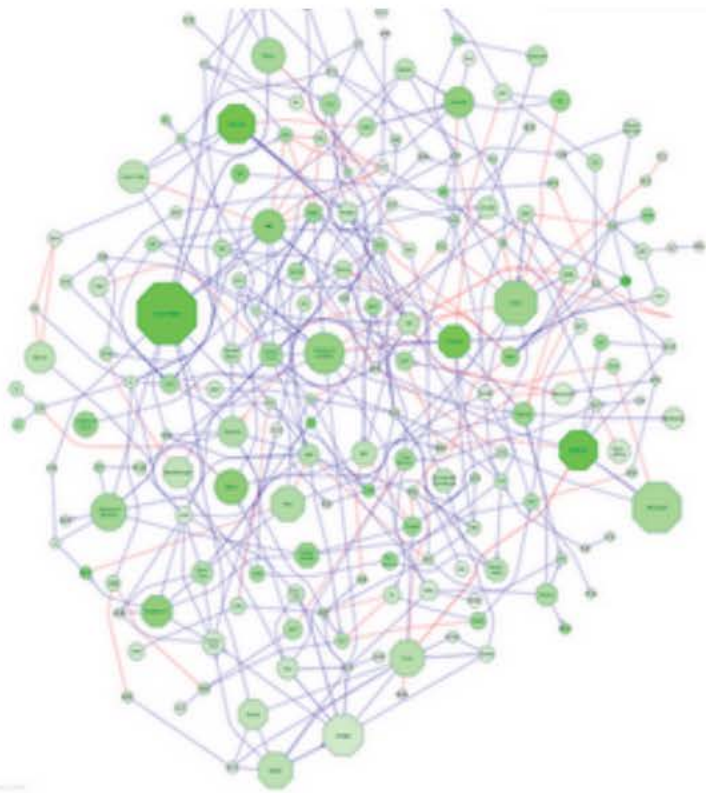


European Wind Interconnection Airtricity Proposed Sites

Construction with **green tech** applications has started.



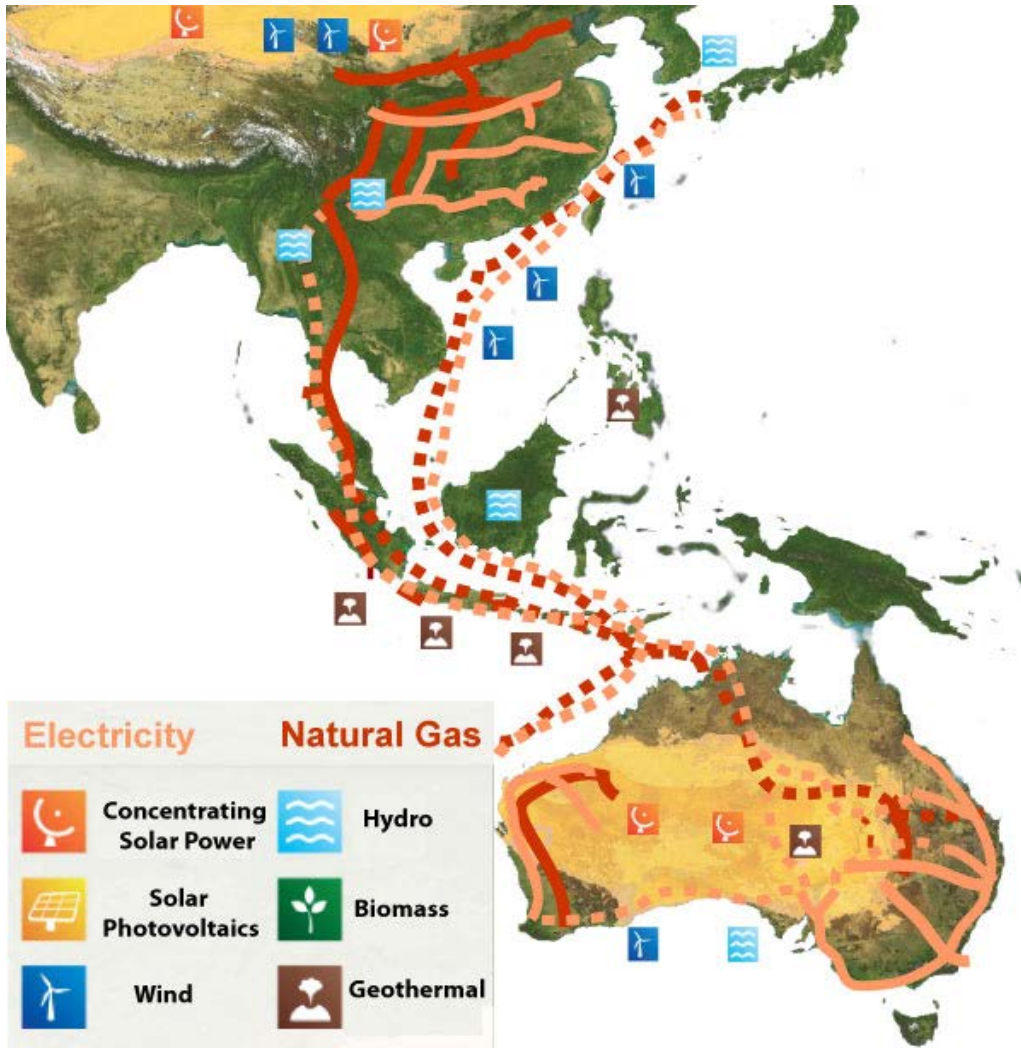
DESERTEC's EU-MENA will connect North Africa's CSP infrastructure with Europe's wind and hydro.



Who will benefit from the **SuperGrid**?

1. **The Planet** – avoided emissions will prevent further pollution, climate change and atmospheric disruptions
2. **The Economy** – cost per kWh is expected to drop as a result of maximizing resources and efficient distribution
3. **Industry** – reliable energy at controlled costs helps to be more competitive; technical innovation and job creation is required to transform energy systems
4. **The Consumer** – clean energy will also become more affordable (SIEPAC projects 20% drop in cost per kWh).

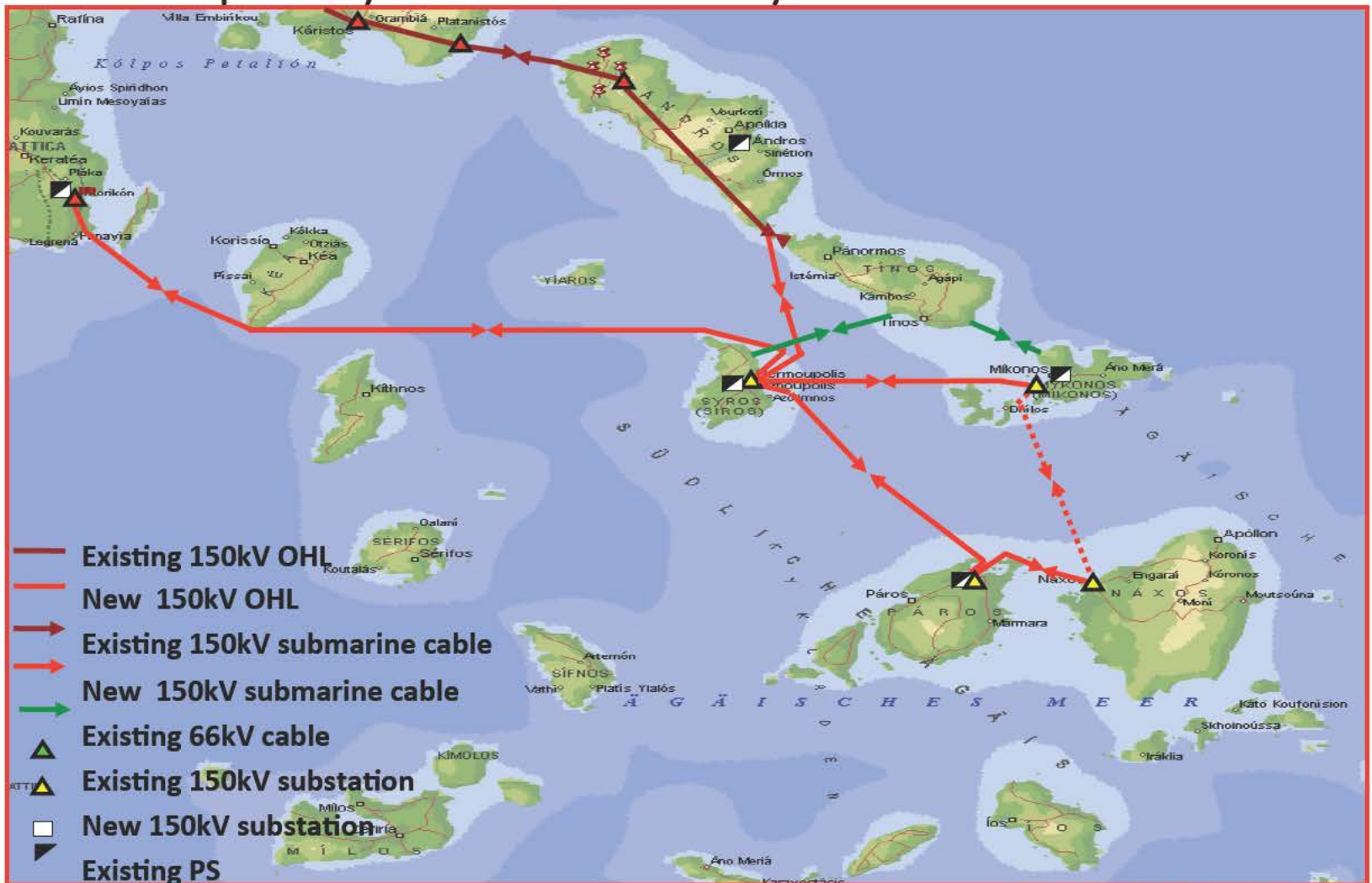
Mapping of energy resources for infrastructure development is essential



A latticework of solar, geothermal, wind and wave energy plants spread around Australia and connecting to China could satisfy the nation's energy needs

Source: DESERTEC

Especially for **stand alone** systems and islands...

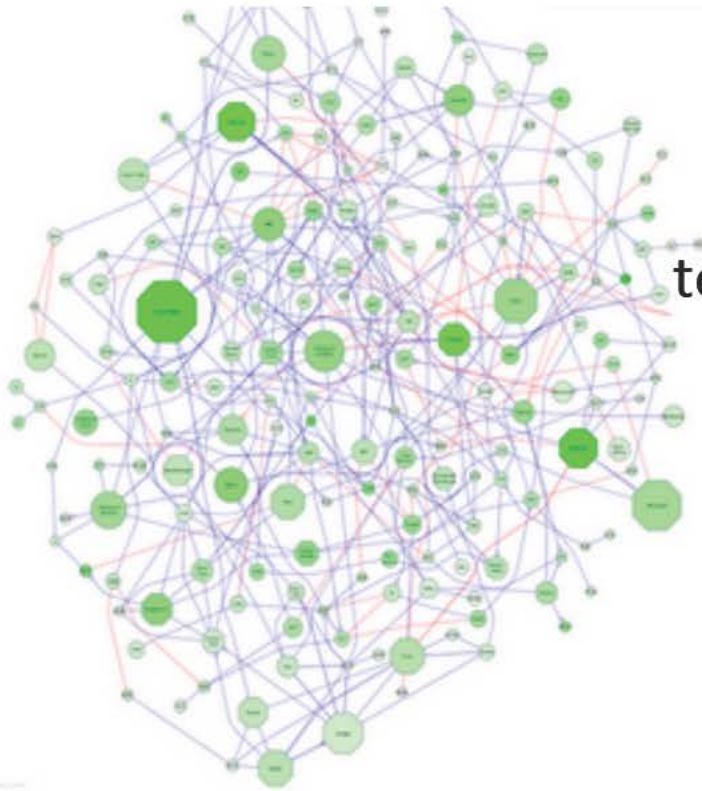


Greek Islands Interconnection Grid

...Like islands in our Caribbean Archipelago



The Caribbean Northern Ring would connect with the Eastern Caribbean Arch to establish a network of alternative and renewable energy generation. Source: Nexant Study



CIEMADeS is organizing its
4th international Conference
to discuss important issues of Interconnection
and the
Super Green Grid

in coordination with **Puerto Rico Energy Center (PREC)**
and the **Organization of American States (OAS)**.



Technical



Environmental

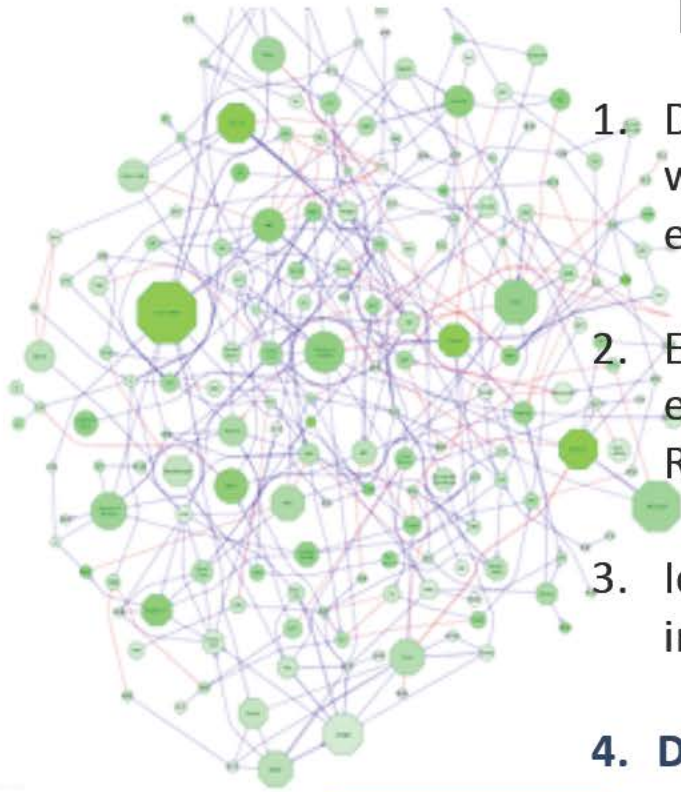


Economic



How will CIEMADeS conference help?

1. Development of technical **perspective and cooperation** with other island countries on projects for development of electricity transmission systems
2. Exchange of data and information to develop technical and economic **blueprint** for an interconnected grid within the Region
3. Identification of **regulatory framework** considerations for investment friendly project development and job creation
4. **Demonstrating the impact of investment** in infrastructure and electricity interconnection on economic activity and growth
5. Presenting actual applications of technology and industry in the production of electricity from renewable energy and its transmission in **projects already in implementation** in other regions of the World.



Planning

Exchange

Analysis





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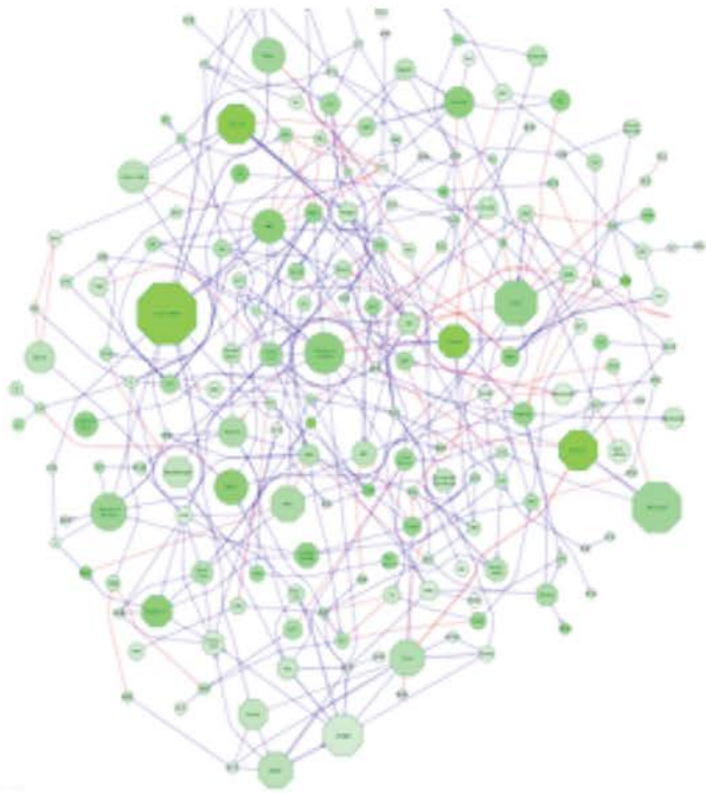


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**4th CIEMADeS
INTERNATIONAL CONFERENCE**

May 5-7

Universidad del Turabo



Register at ciemades.org

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