



EU-GCC CLEAN ENERGY NETWORK



# Exploring EU-GCC Energy and Environmental Analytical Capability

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ETSAP Regular Workshop

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## EU-GCC Clean Energy Network (1/3)

### Organisational and Scientific Co-Ordination

EU Consortium

GCC COUNTERPART



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## EU-GCC Clean Energy Network (2/3)

The **European Commission** provides initial support for the Creation and Operation of the Network over a period of 3 years – the Consortium has been entrusted with the implementation of the Project, following an open call for tenders.

Title	Creation and Operation of an EU-GCC Clean Energy Network
Consortium	<ul style="list-style-type: none"> <li>✓ Institute of Communications and Computer Systems of the National Technical University of Athens (ICCS-NTUA) – <i>Coordinator</i></li> <li>✓ Gulf Research Centre (GRC)</li> <li>✓ Deutsches Zentrum für Luft-und Raumfahrt (DLR)</li> <li>✓ Spanish National Renewable Energy Centre (CENER)</li> <li>✓ French Agency for the Environment and Energy Management (ADEME)</li> <li>✓ University of Stavanger - Centre for Sustainable Energy Solutions (UIS)</li> <li>✓ Electricity Supply Board International (ESBI)</li> <li>✓ Centre for European Policy Studies (CEPS)</li> </ul>
Duration	36 Months
Starting Date	22 December 2009



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## EU-GCC Clean Energy Network (3/3)

- GKPI**
- ✓ MASDAR Institute of Science and Technology, in Abu Dhabi, UAE was selected to be the lead GCC counterpart to the EU Consortium in the Network's development and operation:
    - ❑ Support the promotion of the Network to GCC entities and encourage their participation in it;
    - ❑ Enhance outreach and increase efficiency of the Network in the GCC.
  - ✓ Cooperation with Masdar Institute and the interested GCC organizations to set up a sustainable networking mechanism for supporting EU-GCC cooperation in Clean energy.



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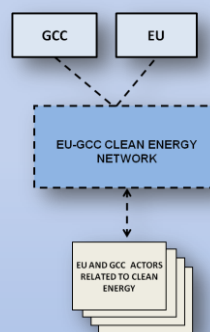


## A. Network Mission (1/2)

Scope



Response to the EU – GCC  
**common interest** for strategic  
clean energy co-operation

- ✓ *The catalyst and element of coordination* for development of cooperation on clean energy.
- ✓ *The practical instrument* for development of concrete cooperation activities in the area of clean energy technologies.



## A. Network Mission (2/2)

### Objective

- ✓ Creation of an established network of important EU &GCC entities active in the area of clean energy, supported by the EU &GCC bodies. 
- ✓ Establishment of more possibilities for close targeted cooperation & working contacts.
- ✓ Acquirement of increased knowledge & latest information on possibilities for joint projects in energy, including through the FP7. 



- ✓ Provision of detailed information & better understanding of EU & GCC policies and frameworks related to clean energy.
- ✓ Promotion & facilitation of a number of joint demonstration and pilot projects.



## B. Network Offering (1/3)

### Stakeholders

- ✓ Inclusion of different types of stakeholders:
  - Academic and Research Institutes/Actors;
  - Governmental and policy making bodies;
  - Utilities;
  - Industry and Commercial actors;
  - Experts in relevant thematic areas;



- ✓ Balanced representation from the GCC and the EU;
- ✓ Coverage of the main thematic areas.



## B. Network Offering (2/3)

### Discussion Groups

#### Five Discussion Groups Operating

- ➔ Renewable Energy Sources (emphasis on solar)
- ➔ Energy Demand Side Management and Energy Efficiency
- ➔ Clean Natural Gas and Related Technologies
- ➔ Electricity Interconnections and Market Integration
- ➔ Carbon Capture and Storage

- ✓ Formulated on September 2010.
- ✓ Operation at an informal level, bringing forward certain EU-GCC co-operation opportunities on clean energy topics.

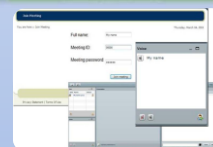


## B. Network Offering (3/3)

### NCCDP

#### Network's Communication - Collaboration - Dissemination Platform

- ✓ Acting as a constant node for EU-GCC dissemination of project activities and results;
- ✓ Serving as a communication channel of all interested parties ⇒ webinars, web meetings, Forums;
- ✓ Reference site containing useful material (online resources);
- ✓ Hosting of dynamic learning application to visualize project results.



## C. Network Activities (1/4)

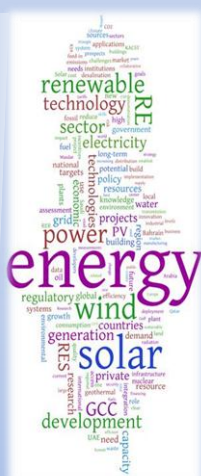
### Our Activities

- ✓ **Networking & Partnership** development with a wide range of EU & GCC stakeholders, including policy-making bodies and industry players,
- ✓ **Development of Joint Projects & Exchange of Researchers** between EU & GCC regions,
- ✓ **Providing an Information Platform** on clean energy regulatory frameworks, policy backgrounds, ongoing and planned initiatives and projects, funding possibilities etc.,
- ✓ **Expert Events**, thematic workshops, seminars, training sessions & high-level conferences,
- ✓ **Publication** of articles in scientific journals on clean energy in the EU & GCC regions,
- ✓ **Liaising** with initiatives in the region in related fields and coordination with other networks/instruments (e.g. under the EU FP7),
- ✓ **Securing Close Contact** with participants from the region as well as the European Commission, headquarters in Brussels.



## C. Network Activities (2/4)

### Implemented Meetings



"Word Cloud" from the presentations of the 1<sup>st</sup> Meeting of the Network's D/Gs

- ✓ **1<sup>st</sup> Discussion Groups' Meeting**  
When: 30<sup>th</sup> of November and 1<sup>st</sup> of December 2010  
Where: Dubai, UAE
- ✓ **1<sup>st</sup> Plenary Meeting of the Network**  
Hosted by Masdar as a Side - Event of the World Future Energy Summit -WFES 2011  
When: 18<sup>th</sup> of January 2011  
Where: Abu Dhabi, UAE
- ✓ **2<sup>nd</sup> Discussion Groups' Meeting**  
When: 11<sup>th</sup> and 12<sup>th</sup> of May 2011  
Where: Brussels, Belgium



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## C. Network Activities (3/4)

### Planned Meetings

- ✓ **3<sup>rd</sup> Discussion Groups' Meeting**  
 When: 24<sup>th</sup> and 25<sup>th</sup> of November 2011  
 Where: Athens, Greece  
 Technical Site Visits: CRES and LTCP, FP7 Project "H2SusBuild"
- ✓ **Discussion Group Meeting on Renewable Energy Sources Seminar on CSP**  
*Side Event of the CSP Today Conference*  
 When: 29<sup>th</sup> and 30<sup>th</sup> of November 2011  
 Where: Seville, Spain  
 Technical Site Visits: Solucar Complex and Gemasolar
- ✓ **4<sup>th</sup> Discussion Groups' Meeting & 2<sup>nd</sup> Annual Plenary Meeting**  
*Side Event of the World Future Energy Summit -WFES 2012*  
 When: 17<sup>th</sup> and 19<sup>th</sup> of January 2011  
 Where: Abu Dhabi, UAE



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## C. Network Activities (4/4)

### Training Seminars

- ✓ In cooperation with the Higher Colleges of Technology (HCT) a one-day Training Seminar on Solar Resource Assessment is organized on January 19, 2011, in Abu Dhabi.
- ✓ In co-operation with CENER, National Renewable Energy Centre of Spain a Training Seminar on Concentrated Solar Thermal Power Plants on 29 November, 2011.
- ✓ The EU-GCC Clean Energy Network identifies and supports **further co operations opportunities** in clean energy related higher and executive education, addressing specific needs, e.g.
  - Energy Efficiency and Demand Side Management;
  - Carbon Capture and Storage technologies;
  - Trigeneration and District Cooling.



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## D. Cooperation Directions (1/3)

Establish & Maintain Dialogue

*Establish Dialogue:* 1<sup>st</sup> Meeting of the Network's Discussion Groups, 30<sup>th</sup> of November and 1<sup>st</sup> of December 2010, in Dubai, UAE.

- ✓ Contribution of ideas and proposals for supporting the EU-GCC Clean Energy Co-operation, based on the experiences acquired in the REACCESS (Risk of Energy Availability: Common Corridors for Europe Supply Security, 2008-2010).
- ✓ The characteristics and potentialities of the modelling methodologies and tools could play an useful role in developing research activities related to the main topics of the DGs:
  - Use of the RES and fossil energy sources;
  - Options and effects of ENEF improvement on the supply & end use device;
  - Advanced mitigation technologies for fossil fuels fuelled plants (through CCS options);
  - Integrated resource (supply & demand) management policies, under defined environmental and economic constraints.



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## D. Cooperation Directions (2/3)

Establish & Maintain Dialogue

*Maintain Dialogue:* Back to back to the REACCESS Final Conference, in Brussels, Belgium, on May 13, 2011.

REACCESS knowledge and expertise gained, as well as the REACCESS DB could assist the Networks' activities on:

- ✓ Updating the state of interconnection in the GCC;
- ✓ Grid Integration Potential for GCC;
- ✓ Technological research on new, more effective and environmentally acceptable ways of importing, transporting and loading, unloading and delivering natural gas.

Related Tools and Models could assist and provide data in the Network's main topics of interest regarding Natural Gas supply:

- ✓ Reliability of Supply;
- ✓ Quality of Supply;
- ✓ Connection Grid Code & Standards;
- ✓ Production Connection Requirements;
- ✓ Transmission Connection Requirements.



## D. Cooperation Directions (3/3)

### Cooperation Pathways

- ✓ Joint research and exchange of best practices experiences;
- ✓ Support the organization of training workshops, seminars and experts' meetings in the GCC;
- ✓ Host a Semi-annual ETSAP meeting in the GCC;
- ✓ Support ETSAP experts active involvement in the EU-GCC Discussion Group activities;
- ✓ Expand a consistent EU-GCC related cooperation and lead to collaborative projects with local, regional and global benefits.



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[www.eugcc-cleanergy.net](http://www.eugcc-cleanergy.net)

Contact us at:

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### Network Contact Points

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**Risk of Energy Availability:  
Common Corridors for Europe Supply Security**



**Thank you  
for your attention!**

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