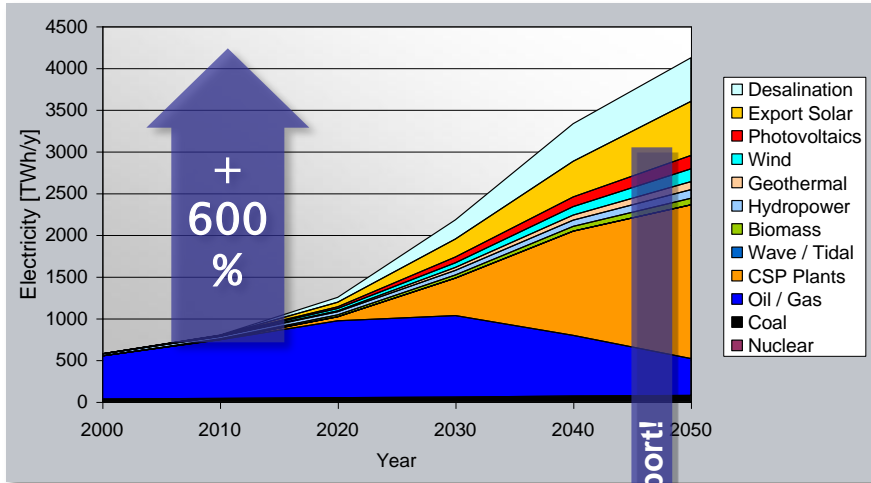




DESERTEC  
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# **V Semaine Méditerranéenne de Leaders Économiques**

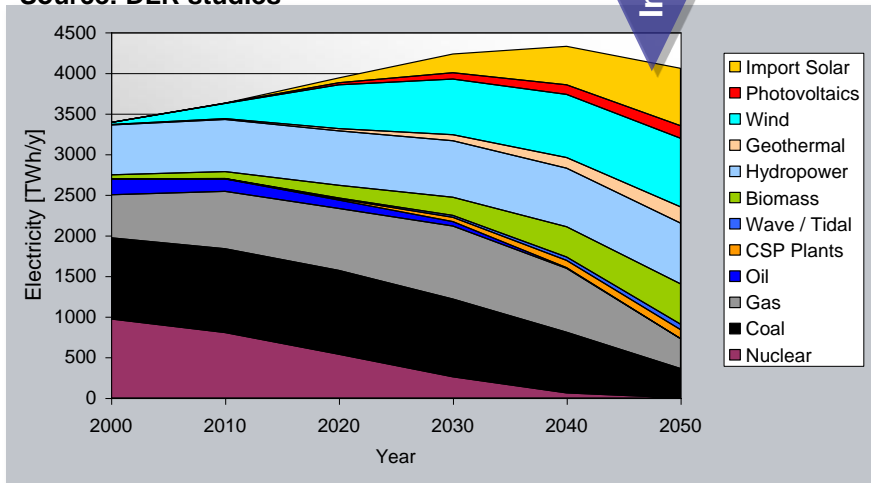
Barcelone 21-25 Novembre 2011



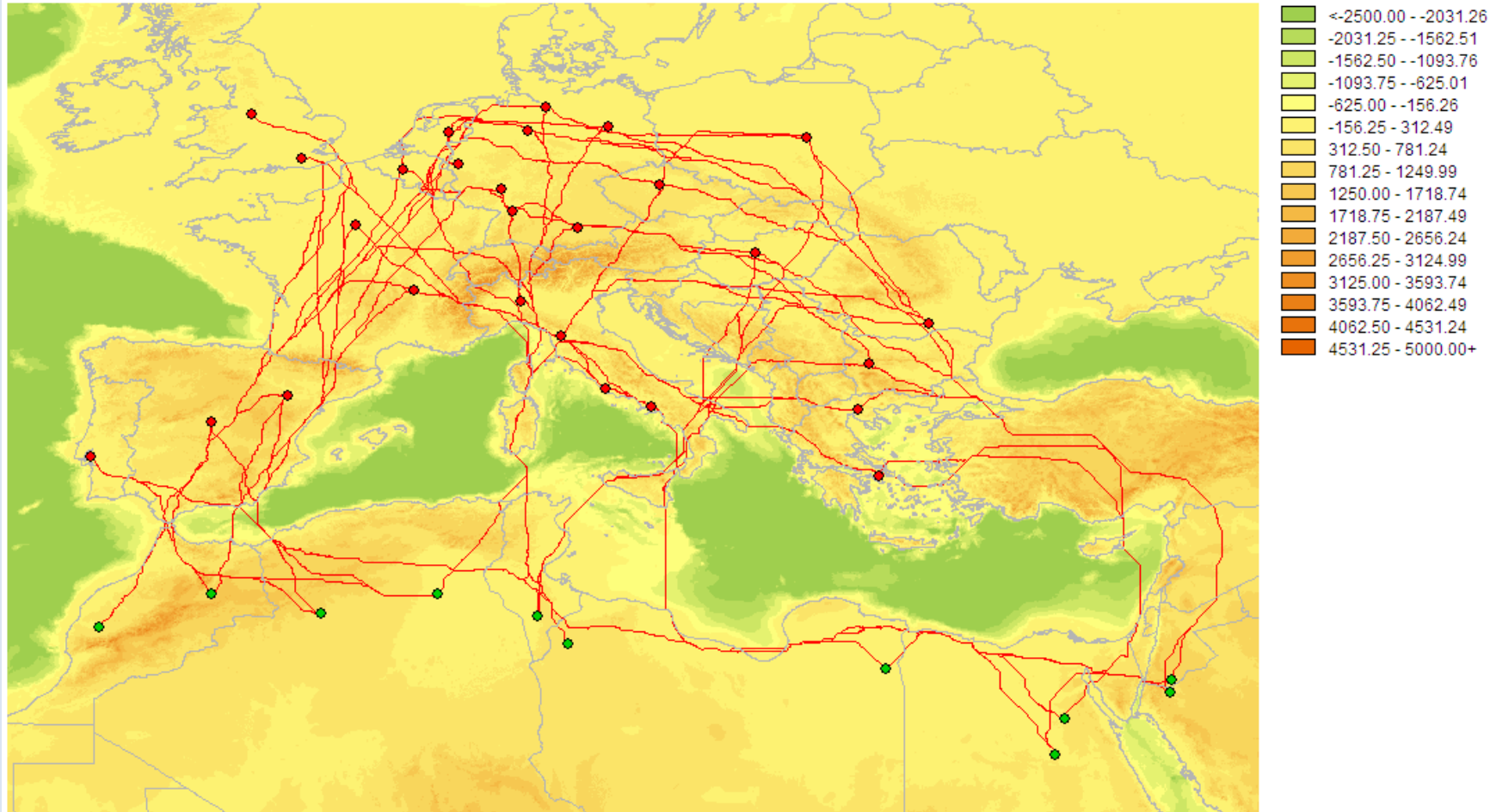
## MENA: Transition Mix 2000-2050

including export to Europe and power  
for water desalination

Source: DLR studies



EU: By clean power from deserts





## Photovoltaic

- Mono-crystalline
- Thin-film
- Concentrated PV



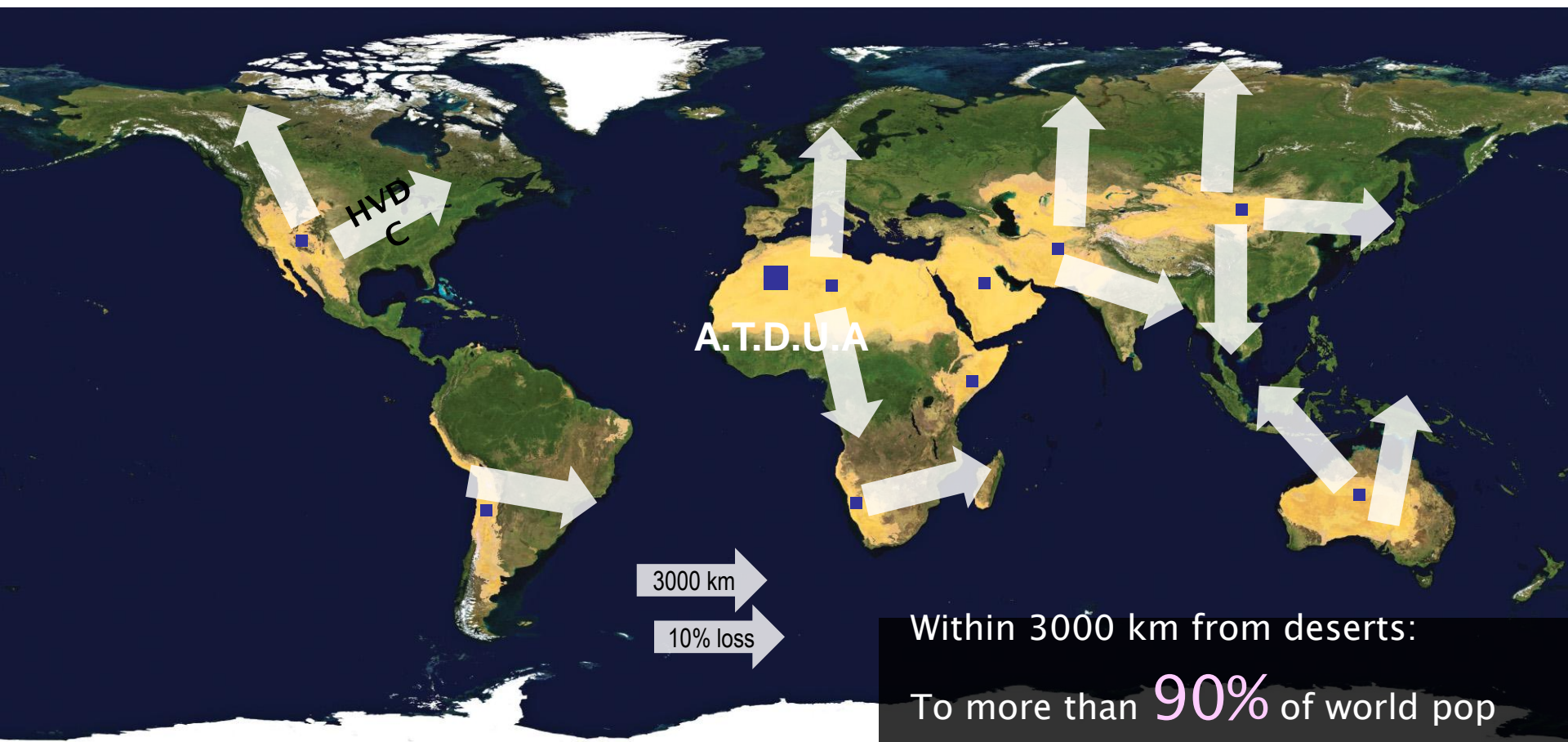
## Concentrated Solar Power

- Parabolic troughs
- Power tower
- Linear Fresnel



## Wind

**+ biomass, geothermal, etc.**



Within 3000 km from deserts:  
To more than **90%** of world pop  
clean power from deserts available.

## sea cable



## under-ground cable



## Two Statements (source :Mr Günther Oettinger 's )

- (i)- Tomorrow's energy challenges cannot be met with today's technologies and conventional ways of thinking.
  - 1- It is about inventing new energy solutions
  - 2- It is about developing new industrial partnerships
  - 3- It is about improving knowledge transfer and enhance capacity building
- (ii)- The Projects have to be developed in cooperation with countries of the region on an equal footing ; **it can not be imposed from the outside**

# Quelles leçons nous enseigne L'examen des différents concepts:

- **MSP**
- **DESERTEC**
- **SSB**



- **Leçon N.1: De grandes attentes des E.R's**
  - **Satisfaire dans les meilleures conditions possibles les besoins nationaux en énergie**
  - **Participer à la solution de questions cruciales: eau, transport, etc..;**
  - **Créer des nouvelles filières industrielles**
  - **Nouvelles opportunités de coopération entre les peuples de EU-MENA**

- **Leçon N.2 : Les défis énergétiques de DEMAIN ne peuvent être abordés avec les technologies d'AUJOURD'UI**
    - Nettes améliorations des performances globales
    - Baisses drastiques des coûts
    - Intégrations aux environnements locaux
- ▼
- ▶ **INVENTER de NOUVEAUX SYSTEMES**
  - ▶ **DEVELOPPER LES RESSOURCES HUMAINES**

- **Leçon N.3 « Business As Usual » is no more an option**
  - Nouveau partenariat industriel
  - Développer le transfert de technologie et renforcer les capacités humaines
  - Instaurer une coopération d'égal à égal :  
Les solutions ne peuvent venir de l'extérieur
  - **Revision des politiques économiques**

# CONTRIBUTIONS AUX REPONSES?



**Industrial Initiative**

**Public Initiative**

**Political Initiative**

**Academic Initiative**



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FOUNDATION

## Objectives

- **Bringing together research, and academic institutions interested in and capable of contributing to the implementation of the DESERTEC Concept.**
- **Promoting the development of human resources, so that energy systems can be constructed with a maximum of local products and services.**
- **Contributing to the design, manufacture, installation, operation and maintenance of future DESERTEC energy systems..**

## Missions

- **International Cooperation**
- **Research and Development**
- **Dissemination and Promotion of Technology and Knowledge**
- **Support for the Creation of Local Enterprises**

## **Fields of activity:**

- **Renewable Energies and their applications:**

**Mainly: Solar, Wind**

**Water Desalination, mobility**

- **Energy Efficiency**
- **Environmental security**
- **Socio-economic effects**



## Today:

**Members: 19 Institutions from MENA**  
**7 Institutions from Europe**  
**DESERTEC Foundation**  
**5 Individuals**

**Membership in process: 5 Institutions**

**Governance : Office in Tunis & Executive Director**  
**Supervisory Board**  
**Science & Technology Council**

## Working Program Priorities

- **Master Programmes: Capacity building**
- **Academic cooperation**
- **Public Awareness and Acceptance for Renewable Energies in general**
- **Creation of “ by country development scenarios”.**
- **Socio-economic effects**
- **Technological issues:**
  - **Dust / Cleaning Mirrors**
  - **Dry Cooling**
  - **System choice :CSP ( PT / LF / ST)-PV-CPV-Wind?**

**THANK YOU FOR YOUR ATTENTION**