

European Union Energy Day ^W

#EUenergyday

Transitioning
the Electricity Sector

Abu Dhabi, WFES, 17 January 2017

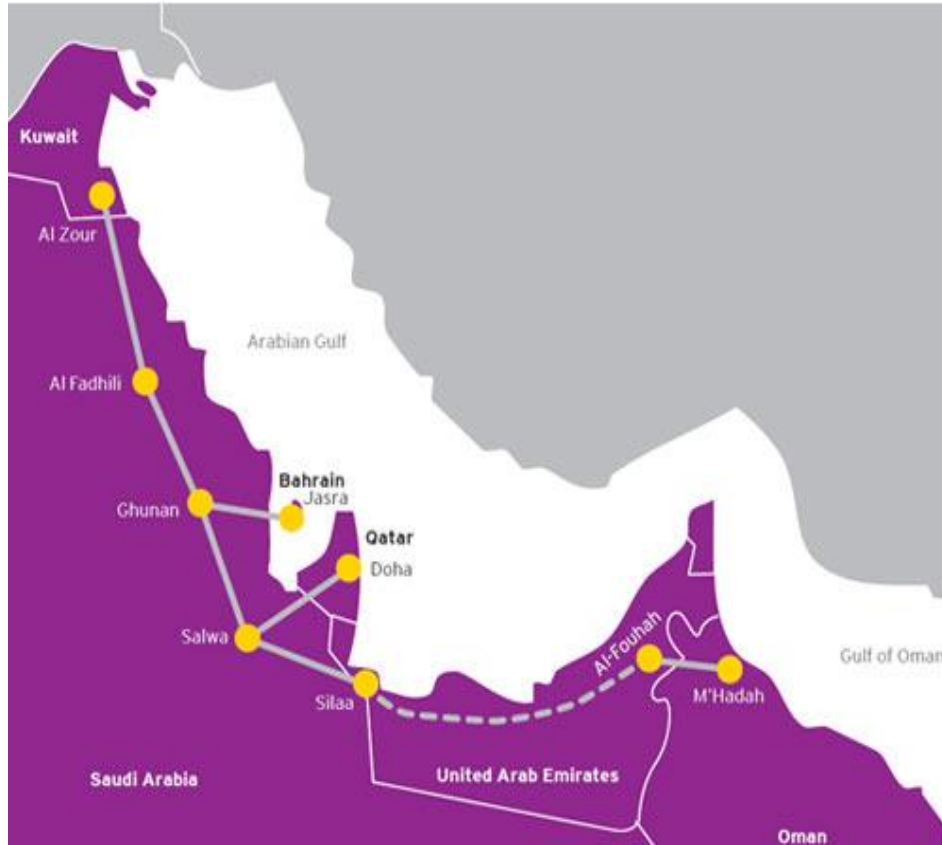


10th EDITION
WORLD FUTURE
ENERGY SUMMIT

EU Energy Workshop Transitioning the Electricity Sector

Eng. Ahmed Al-Ebrahim
CEO of GCCIA

A new Era for the GCC Power Industry



GCCIA provides a new level of Energy security for the GCC Countries:

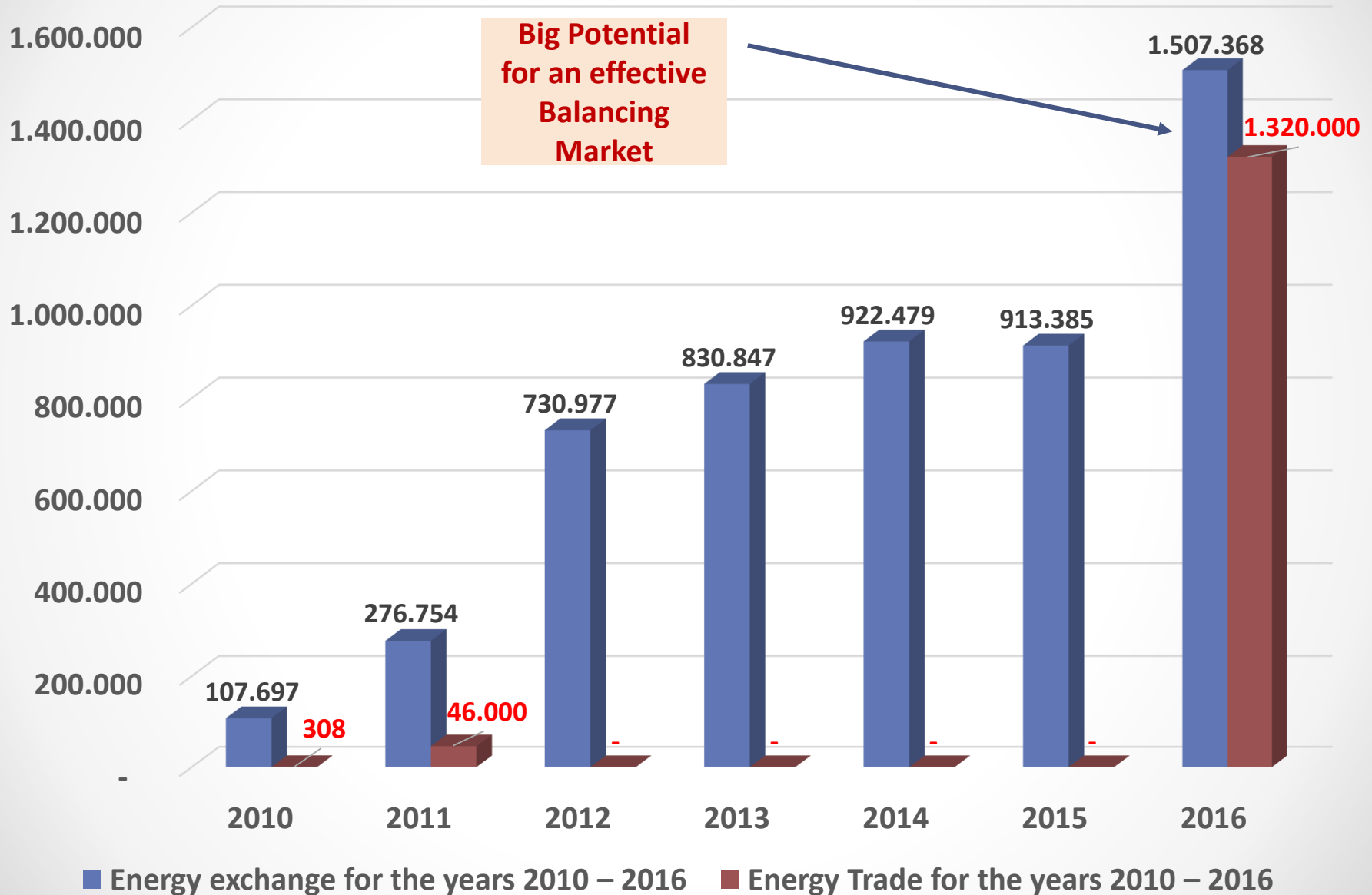
- **Sharing of reserves and Capacities**
- **Support during emergencies**
- **Implicit Regional Balancing Services**

Regional Balancing between GCC TSOs through the GCC Interconnector

Current Situation:

- No BALANCING MARKET exist at GCC level
- Balancing power flows between GCC systems as UNSCHEDULED DEVIATIONS (UDs) (Types 1 & 2).
- Type 1 UDs are compensated In-Kind
- Type 2 UDs are compensated at a pre-set AGREED_TARIFF \$\$\$
- Excessive flows are penalized

Energy Exchange and Trade over the GCC Interconnection



GCC Renewable Energy Projects & Targets

Current Projects

Kuwait	MW
Shagaya RE Complex I	10
Shagaya RE Complex I	10
Shagaya RE Complex I	10

Targets 2030: 11,000MW 15%

Current Projects

Saudi Arabia	MW
Al Khafji	15
Mecca	100
Green Duba ISCC	50

Targets 2040: 54,000MW 30%

Current Projects

UAE	MW
Dubai MBR Solar Park Phase 2	470
Abu Dhabi Solar Park (including Noor 1 project)	700

Targets:

Abu Dhabi 2020:	7%
Dubai 2030: 5,000MW	25%

Current Projects

Oman	MW
Amal Oil Field	1021
Dhofar Wind Farm	50

Targets 2020 : 10%

No Current Projects

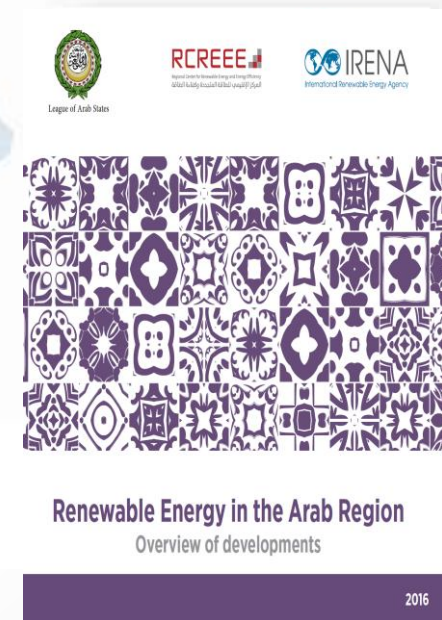
Targets 2030: 250MW 5%

Current Projects

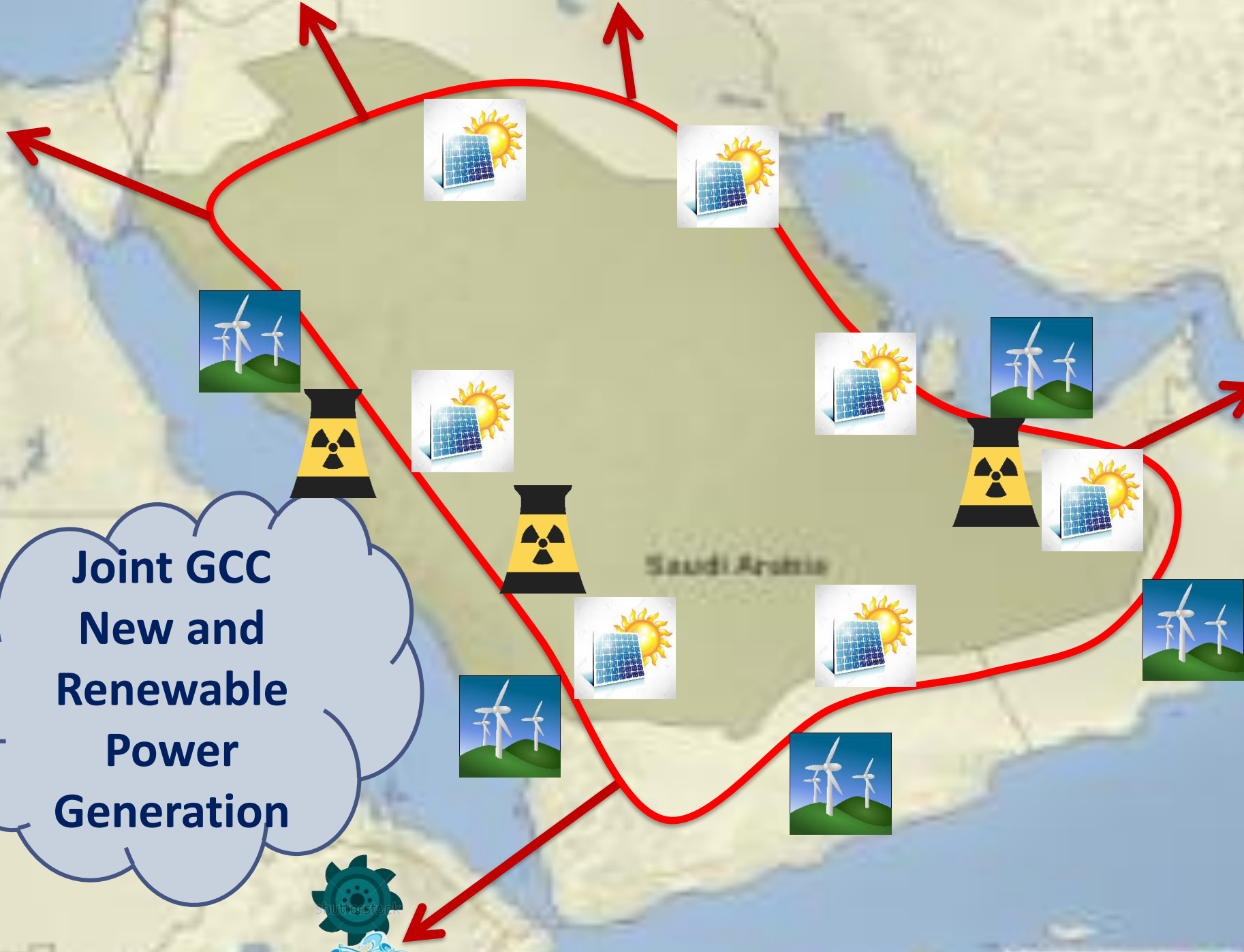
Qatar	MW
Duhail	10
Kahramaa project	100

Targets 2030: 1,800MW 20%

Balancing issues would amplify with more penetration of REN



**Joint GCC
New and
Renewable
Power
Generation**



Transforming the GCC Market: the need for Regional Balancing Market in the GCC

The Creation of a Regional Balancing Market will:

- Ensure the security of supply at the least cost, by promoting energy efficiency through Pan-GCC competition
- Allow for the participation of upcoming Variable REN sources in an effective competition environment,
- Give the right price signals to promote Demand Side Management and Storage schemes,
- Require the development of an enabling regulatory framework and a revised balancing code.