



CAPACITY BUILDING IN THE FIELD OF RENEWABLE EENERGY

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PRESENTATION OUTLINES

- Status of Renewable Energy in GCC Countries
- Future Plans
- Capacity Building Domains
- Reflection on Capacity Building Avenues
- Concluding Remarks

RENEWABLE ENERGY



Solar



Wind



Biomass



Wave and Tidal



Geothermal



Hydropower

RENEWABLE ENERGY IN GCC COUNTRIES

Desire to:

- Reduce reliance on oil and gas based energy infrastructure
- Diversify energy supply mix
- Reduce environmental impacts
- Keep pace with global trends

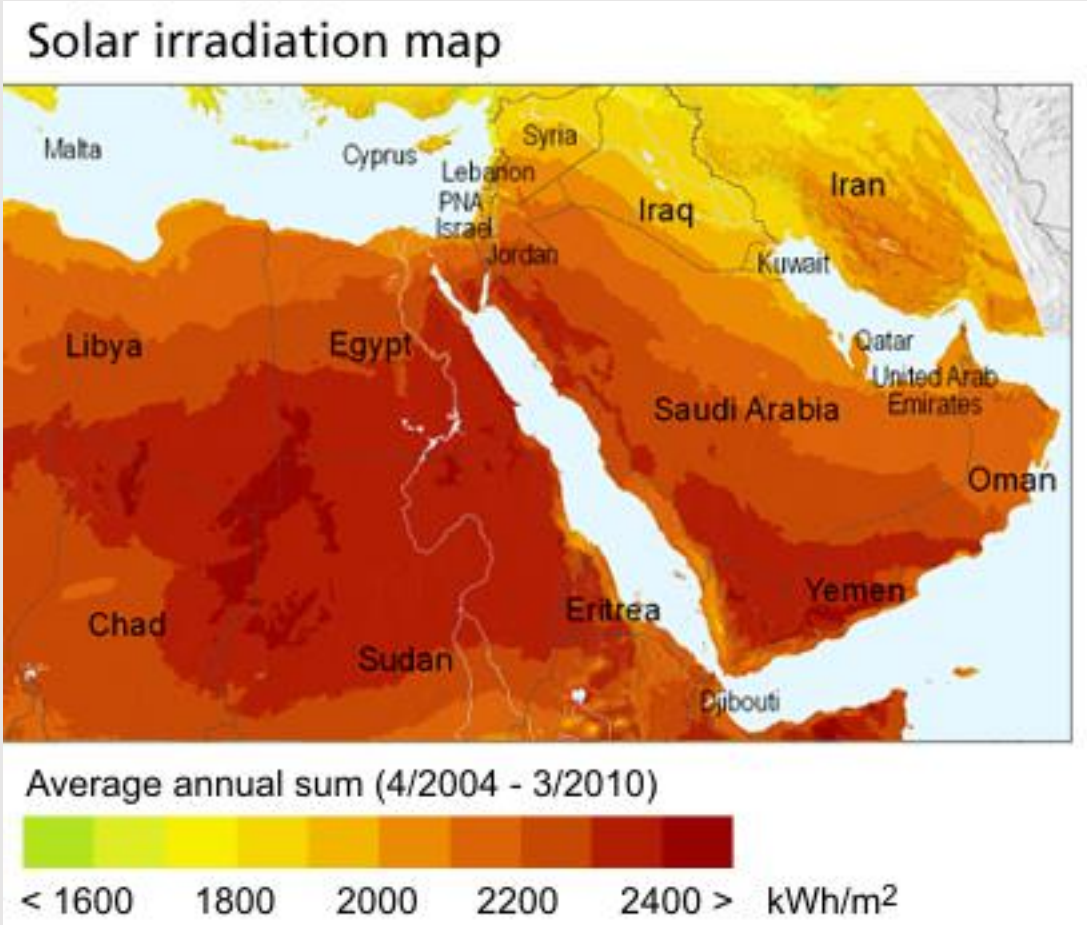
Have:

- Taken initiative/have set targets to promote renewables
- Strong solar resource

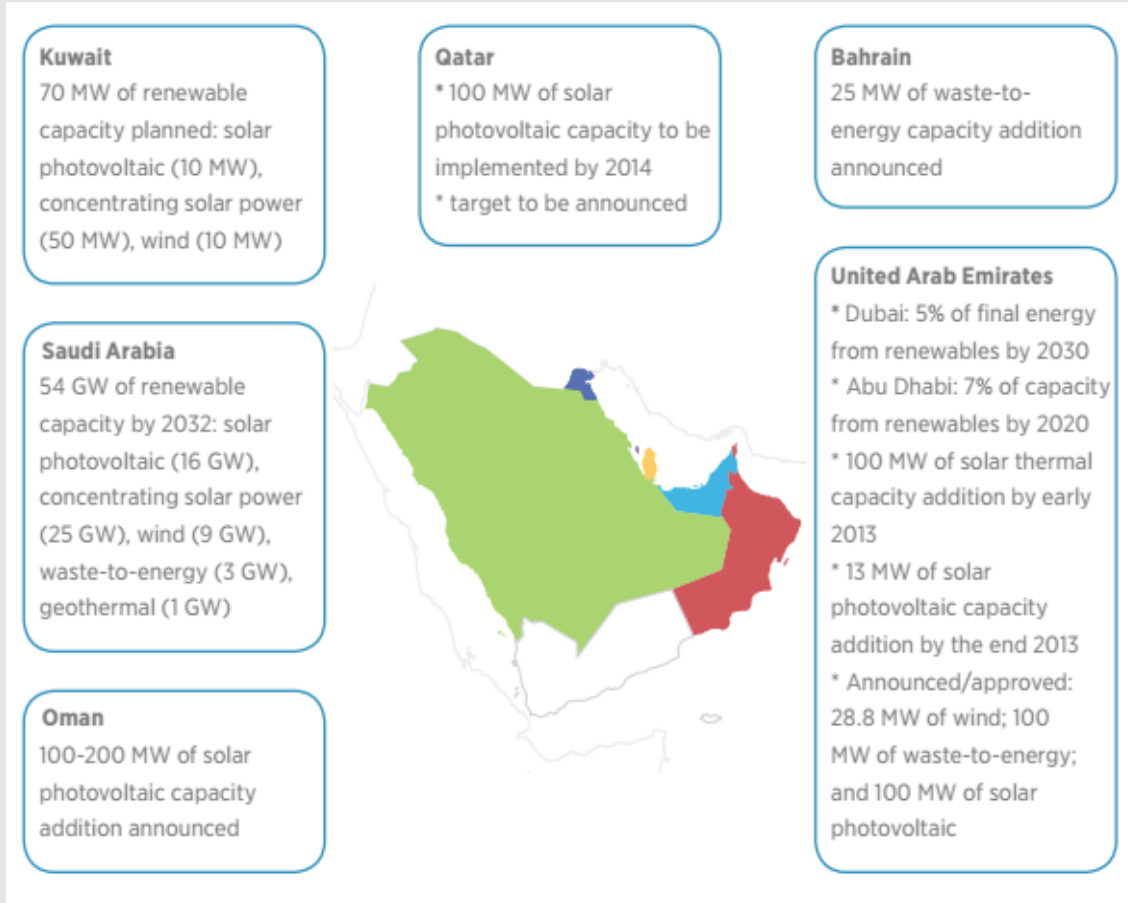
Need:

- Capacity building

SOLAR POTENTIAL IN GCC

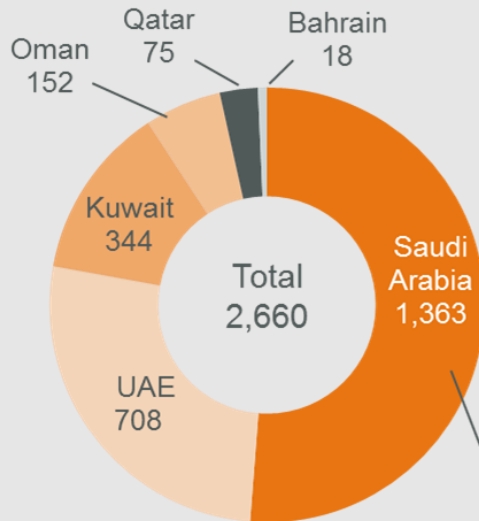


GCC RE PLANS



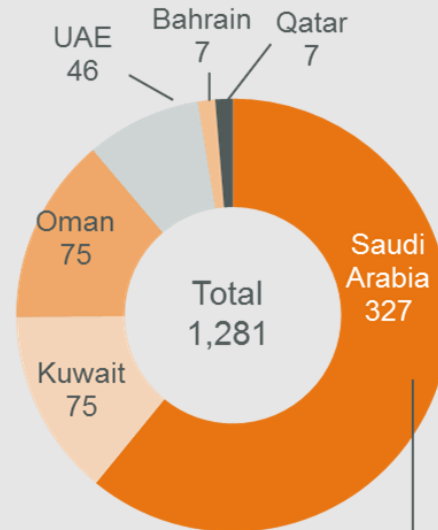
GCC RE PLANS

Cumulative installed solar capacity, GCC, 2018 [MW]



USD 1.5–2B investment

Cumulative installed wind capacity, GCC, 2018 [MW]



~USD 700M investment

CAPACITY BUILDING DOMAINS

- Policy frameworks
- Human resource development
- Research & development
- Development of technology base
- Partnerships and collaborations
- Business models

POLICY FRAMEWORKS

- **Regulatory policies**
 - Utilities
 - Consumers
 - Wider stakeholders – industry, building and construction sector
-
- **Financial policies**
 - Utilities
 - System providers
 - Consumers

HUMAN RESOURCE DEVELOPMENT

- Knowledge base and skill set to cover the full value chain
- Academic programs
- Vocational training
- Public/civil society awareness

RESEARCH & DEVELOPMENT

- Innovative solution
- Customization of internationally available solutions
- Effective policy and technology deployment mechanisms

LOCAL CONDITIONS!



DEVELOPMENT OF TECHNOLOGY BASE

- Local manufacturing
- International partnerships

PARTNERSHIPS AND COLLABORATIONS

- International partnerships on technical and financial fronts
- Local partnerships
- Inter-stakeholder cooperation
- Technology-human partnership

BUSINESS MODELS

- Global success stories
- Customization/adaptation of international models
- Local knowledge and wisdom based models
- Initiative and confidence building examples

CONCLUSIONS

- GCC countries have significant renewable and financial resources
- There is however need for capacity building to achieve the desired renewable energy targets
- Capacity building is needed in the following domains:
 - Development of conducive policies and implementation roadmaps
 - Knowledge base and skill set to cover the full value chain
 - Inter stakeholder cooperation – understand the needs, opportunities and avenues of working for a common goal
 - Research & development to develop best-fit solutions
 - Development of local industrial base to optimize
 - Effective business models, entrepreneurs and initiative examples

Thanks for your attention