

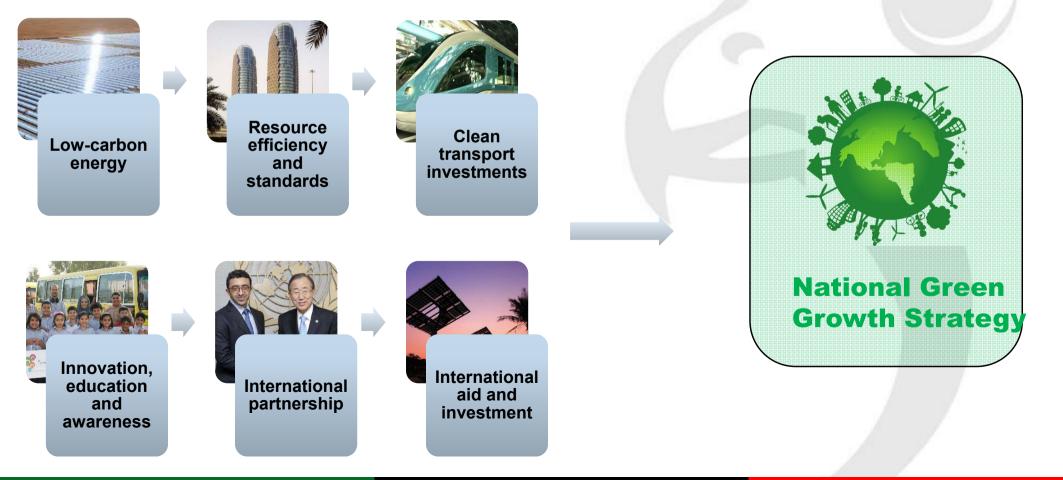
Building domestic actions against climate change:

The UAE's sustainability transformation

11 March 2014



Hydrocarbon exports play a critical role in the UAE's domestic economy, and in ensuring global energy security. However, we are moving beyond hydrocarbons, towards a diverse, sustainable economy.



Low-carbon energy

The UAE is moving beyond petroleum, and is investing to make alternative energy affordable.



Renewable energy

- First in the region to set targets (1500MW by 2020, 2500MW by 2030)
- 12% of the world's CSP in 2013

R&D

- Pioneering investments in renewable energy technology
- Masdar and Taqa: using sovereign wealth funds to drive the industry

Nuclear energy

 \$40b nuclear program: 20% decarbonisation of the power sector and a model for international transparency

Hydrocarbons

- First GCC country to ban
 gas-flaring
- One of the world's only large-scale CCS projects: cleaning up the industry



The region's first solar plant, at Masdar.

3 Resource efficiency and performance standards The UAE is setting standards that make sense across the globe.



Building standards

- First in the region to set mandatory sustainability standards for buildings
- Estidama 33% reduction in water and energy consumption

Appliance efficiency

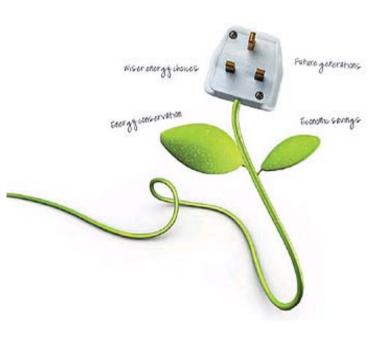
- First in the region to regulate appliance (inc. removing lowestperforming A/C units)
- Incandescent lights bulbs banned from June; LED standard for public lighting

Water

- Phasing-in water efficient crops
- New desalination plants built to approx. 80% of fuel efficiency
- Abu Dhabi to have 100% wastewater recycling

Cooling

 Pilot-studies underway to underpin cooling regulations (e.g., regular A/C maintenance (no capex) results in 17% energy savings) Demonstrate where long-term savings justify upfront costs -even in an energy-rich country



4 Clean transport investments

The UAE is promoting growth through resource-efficient transportation.



Buses

- Bus system expanded and enhanced
- Dubai: 32,000 daily passengers
- Abu Dhabi: 10 million rides in 2008, 60 million rides today

Aviation

 Emirates and Etihad: among world's most energy-efficient fleets, committed to industry-wide carbon neutral growth by 2020

Rail

- Dubai Metro was the first light rail system in the Middle East, over 150,000 daily passengers
- \$11b investment in nationwide rail network (freight and passengers)

Alternative fuels

- ADNOC building pilot network of LNG fueling and engine conversation stations
- 25% of Abu Dhabi taxi fleet converted to LNG
- CNG buses piloted



Dubai Metro

Innovation, education and awareness

The UAE is building the culture of sustainability through education.



launched public awareness campaigns to encourage energy and water efficiency (inc. "Waterwise", "Powerwise", "Heroes of the UAE")



Join heroesoftheuae.ae

Heroes of the UAE: the GCC's most successful "green" campaign



ENERGY PR

6 International partnership

The UAE is advancing sustainability through international cooperation.





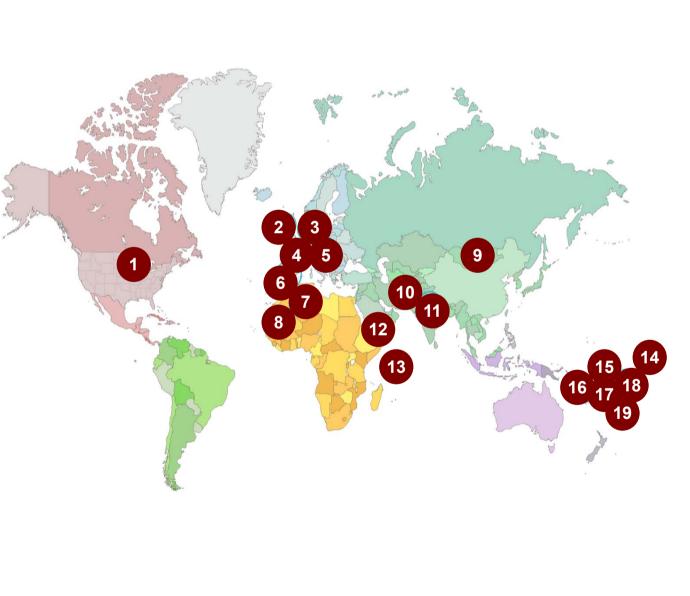
- Host of the International Renewable Energy Agency (IRENA): first major intergovernmental organization in the Middle East, 159 member countries
- World Future Energy Summit: world's largest annual sustainable energy and water tradeshow and policy discussion (31,000 delegates, over 80 heads of state/govt and ministers)
- Masdar establishes first clean energy partnerships in the Middle East adapt cutting-edge technologies for emerging markets
- UAE runs world's first dedicated renewable energy aid program: \$400 million commitment to demonstrate the viability of renewable energy in developing countries

7 International aid and investment

The UAE is also investing directly in renewable energy projects overseas, and makes significant foreign aid contributions to encourage clean energy deployment.



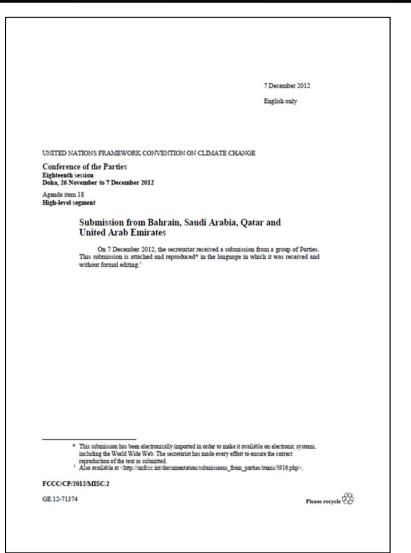
No	Project
1	Minnesota, USA – Lakefield Wind Project (Masdar)
2	London, UK – London Array Wind Farm (Masdar)
3	Alkmaar, Netherlands – Energy Innovation Park (Taqa)
4	Netherlands, Rotterdam – CCS Project (Taqa)
5	Germany – Masdar PV GmbH (<i>Masdar</i>)
6	Spain – Torresol Energy (<i>Masdar</i>)
7	Algeria – Funding for Hydroelectric Power Plants (<i>ADFD</i>)
8	Mauritania – Sheikh Zayed Power Plant (Masdar, ADFD)
9	Mongolia – funding for Hydroelectric Power Plants (<i>ADFD</i>)
10	Helmand Province, Afghanistan – Rooftop PV (Masdar, ADFD)
11	India – Sorang Hydro Power Project (Taqa)
12	Yemen – Funding for geothermal projects (ADFD)
13	Seychelles – Port Victoria Wind Farm (Masdar, ADFD)
14	Kiribati – PV plant and street lights (<i>Pacific Partnership Fund</i>)
15	Tuvalu – PV plant (Pacific Partnership Fund)
16	Vanuatu — PV plant (Pacific Partnership Fund)
17	Fiji – PV plant (Pacific Partnership Fund)
18	Samoa – Wind turbines (Pacific Partnership Fund)
19	Tonga – Vavau'u solar farm (<i>Masdar, ADFD</i>)



8 Economic diversification and the climate agreement

A broader framework is needed, to recognise these contributions

- The UAE has made many voluntary contributions in response to climate change -- at the heart of this is an active policy of economic diversification
- The current international framework does not allow us to adequately put forward these efforts
- A broader umbrella is required, which more clearly recognises the imperatives of sustainable development and economic diversification







Thank you

