

## RENEWABLE ENERGY

Wind Measurement Study



# Wind Measurement Campaign of The Kingdom of Saudi Arabia

#### Background

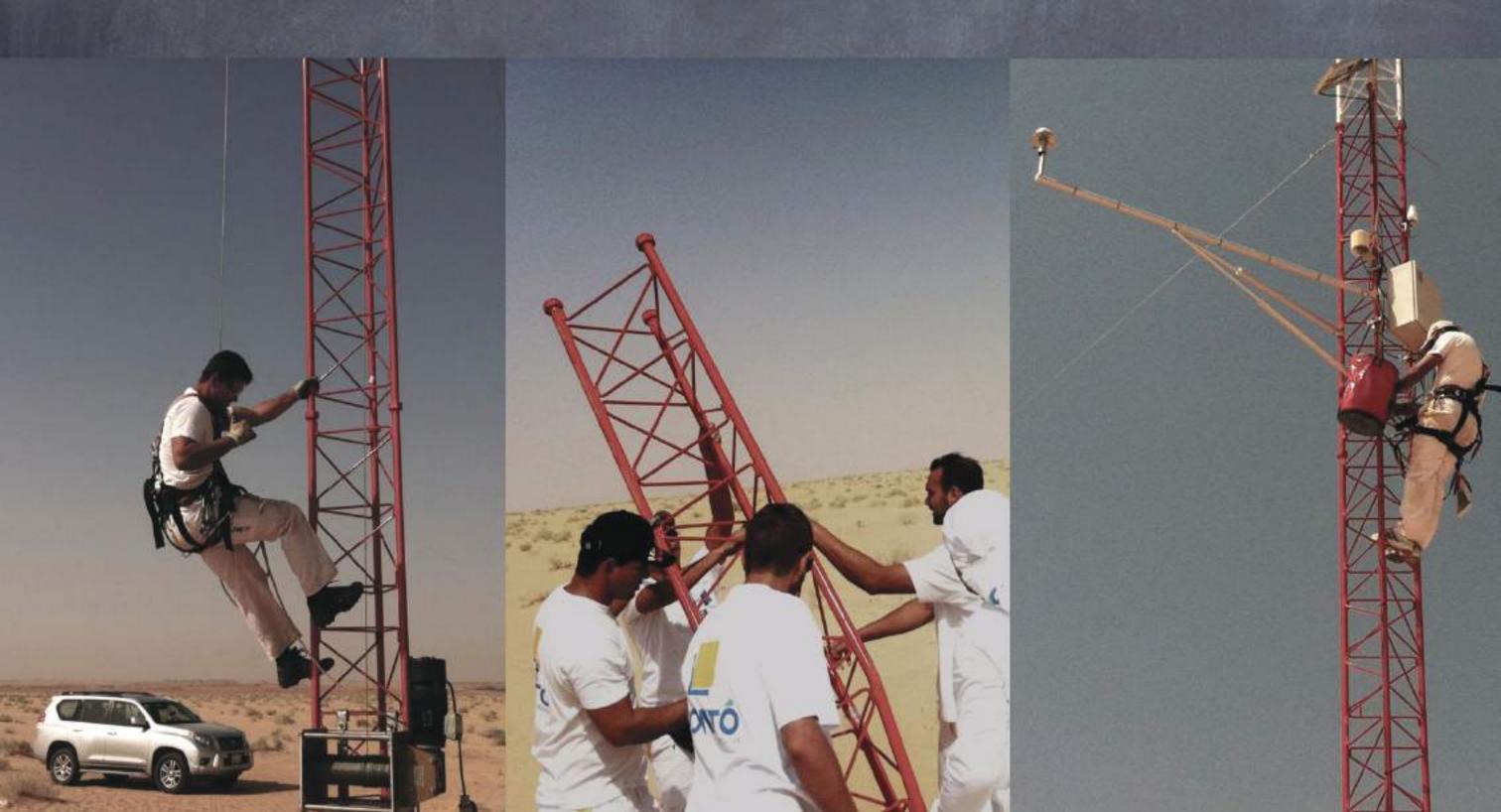
- Conduct a Kingdom-wide wind measurement campaign to determine if wind energy is a feasible source of power in the Kingdom.
- Campaign based on a preliminary study conducted in 2010.
- Met masts are being installed at sites for a one year measurement study looking at wind conditions, additional infrastructure requirements and cost of electricity generation.
- Findings will be used for future wind farm development efforts.



# Example of Wind Measurement Campaign at Qassim

 A 90m high mast has been installed at Qassim with sensors located at different elevations.

#### Tower construction



#### Sensors located on the towers and the record logger



## **Environmental Benefits**



- Wind measurement is the first step toward wind farm deployment
- The Kingdom estimates potention wind power in the range of 7-9 GW
- Wildlife friendly

# أرامكو السعودية Saudi Aramco

