



The UAE Peaceful Nuclear Energy Program

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Emirates Nuclear Energy Corporation



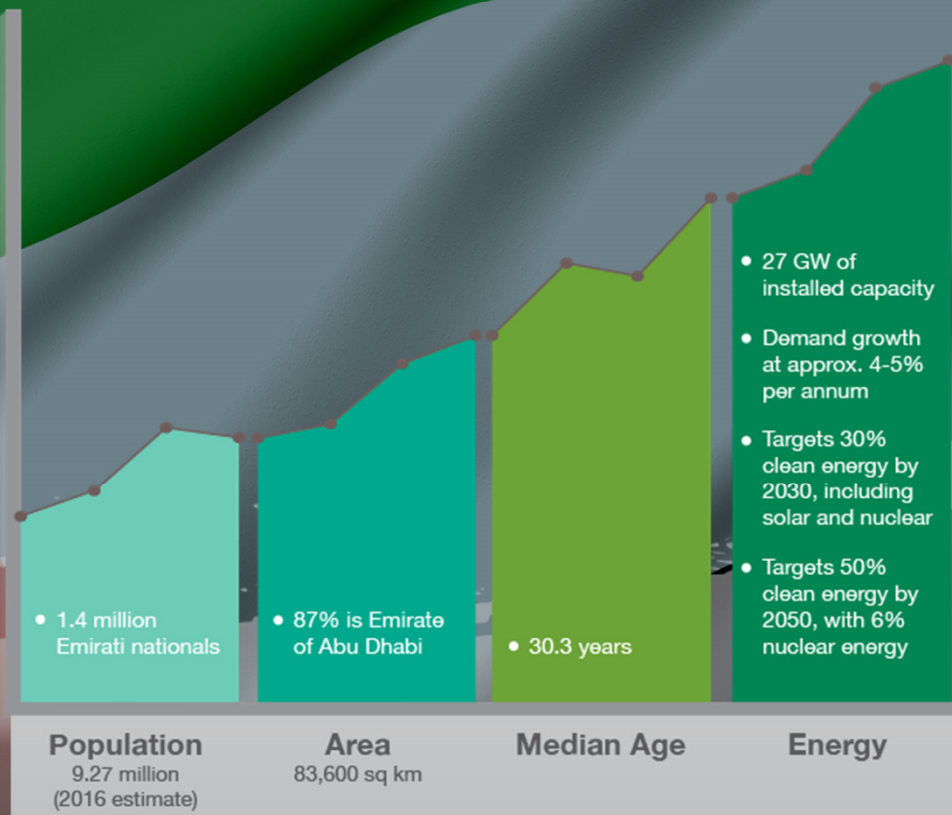
Contents

- Peaceful Nuclear Energy in the UAE
- Delivering a nuclear new build project
- Update on the Barakah Nuclear Energy Plant
- Aspects of a full peaceful nuclear energy program



Peaceful Nuclear Energy in the UAE

The UAE is Growing Fast



Options for Meeting Demand



Nuclear Energy

Clean, proven and commercially viable technology that delivers significant volumes of baseload electricity



Natural Gas

Generates largest share of UAE electricity, but not enough to meet future demand



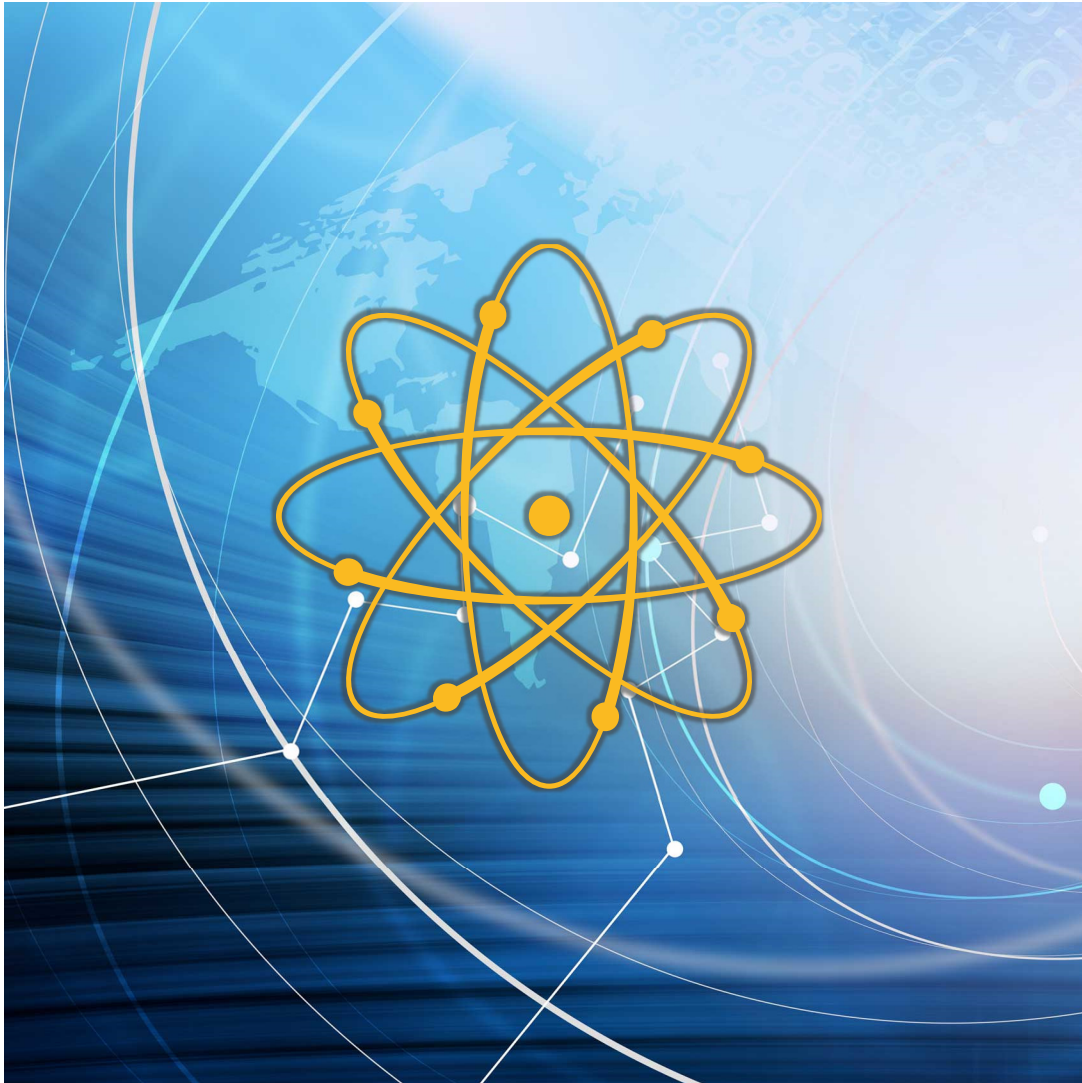
Coal

Low in cost, but presents environmental concerns



Renewable Energy

Important part of the UAE's energy mix, but can only supply limited capacity



The Right Choice for the UAE

- Safe, clean and proven technology
- Commercially viable
- Delivers significant volumes of baseload electricity

UAE Policy on Peaceful Nuclear Energy

Policy Principles:

- Complete operational transparency
- Highest standards of non-proliferation
- Highest standards of safety and security
- Conformance to IAEA standards
- Partnerships with the governments and firms of responsible nations, and appropriate expert organizations
- A program that best ensures long-term sustainability

Policy released in April 2008

Federal Law & Regulation





حفل التوقيع Signing Ceremony

مؤسسة الإمارات للطاقة النووية
Emirates Nuclear Energy Corporation



Governance and Regulation

Our Mission & Vision

Mission

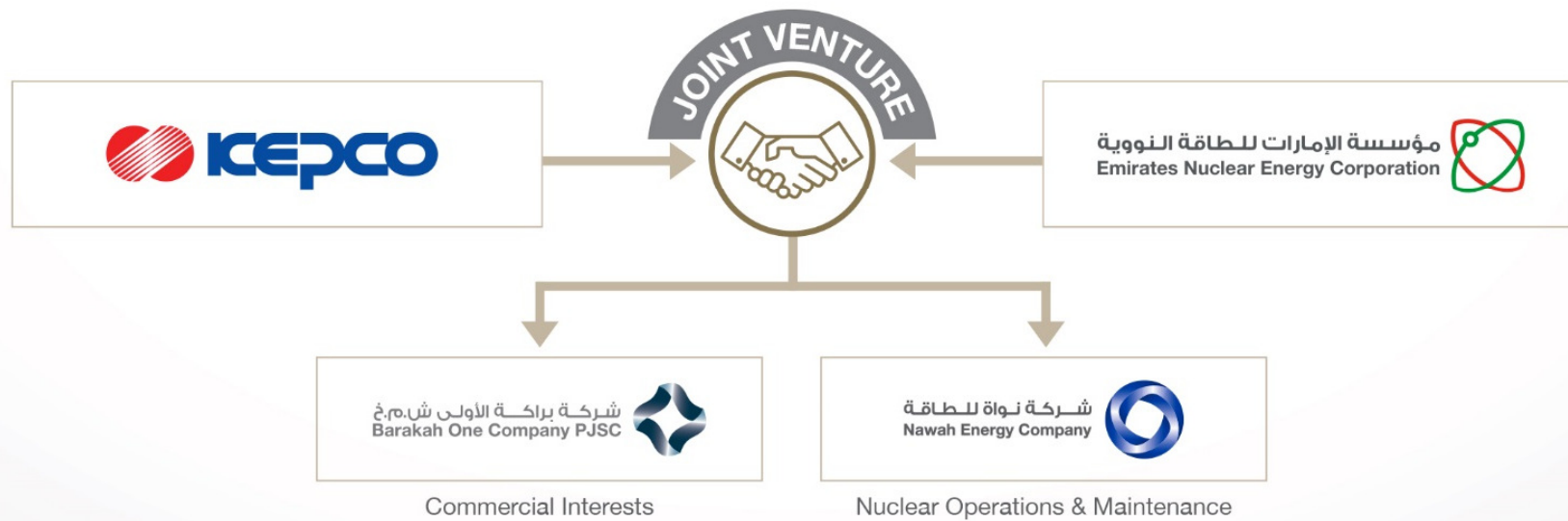
To deliver safe, clean, efficient and reliable nuclear energy to the UAE grid, develop our people and build sustainable nuclear sector capability, and ensure full alignment with the UAE energy strategy.

Vision

Powering the future growth and prosperity of the UAE through a safe and sustainable peaceful nuclear energy program.



The Joint Venture

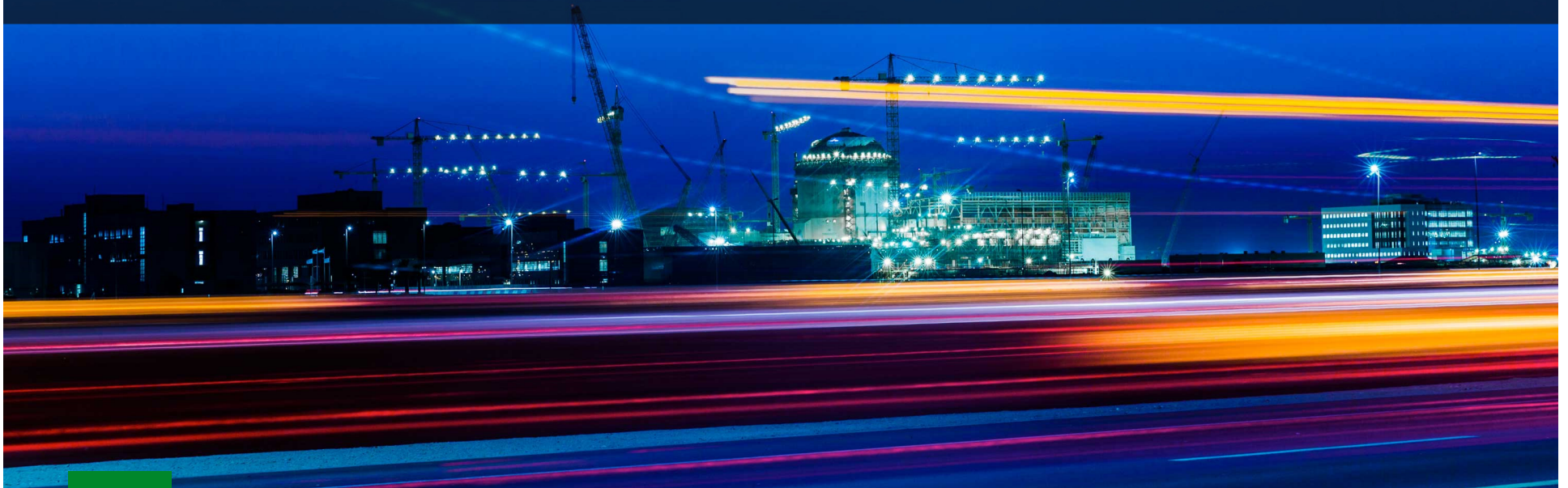


About Nawah Energy Company

Nawah is co-owned by ENEC (82%) and KEPCO (18%)

Nawah will operate and maintain the four units at Barakah Nuclear Energy Plant.

شركة نواة للطاقة
Nawah Energy Company



About Barakah One Company

Barakah One Company is co-owned by ENEC (82%)
and KEPCO (18%)

Represents commercial interests of Barakah project

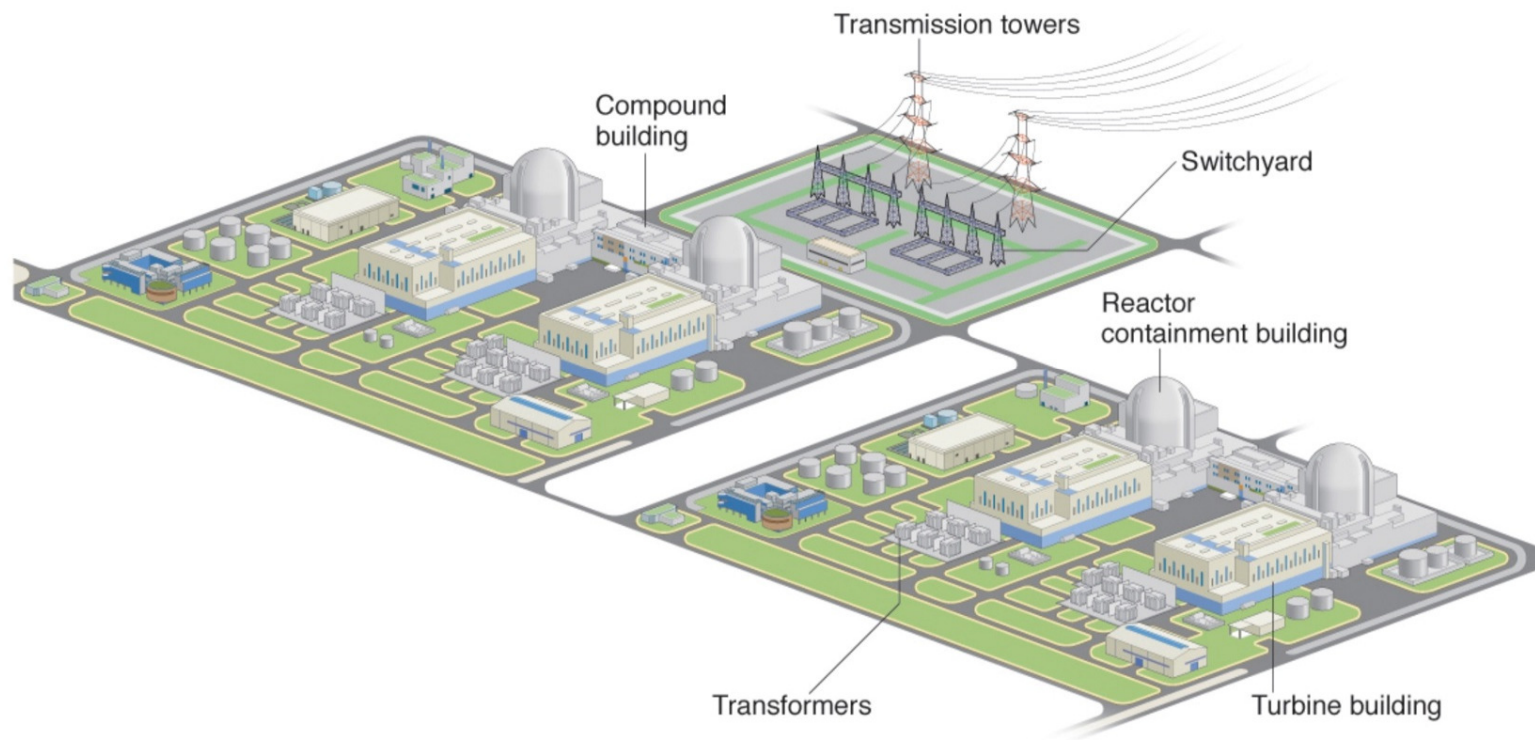
شركة براكاة الأولى ش.م.خ
Barakah One Company PJSC



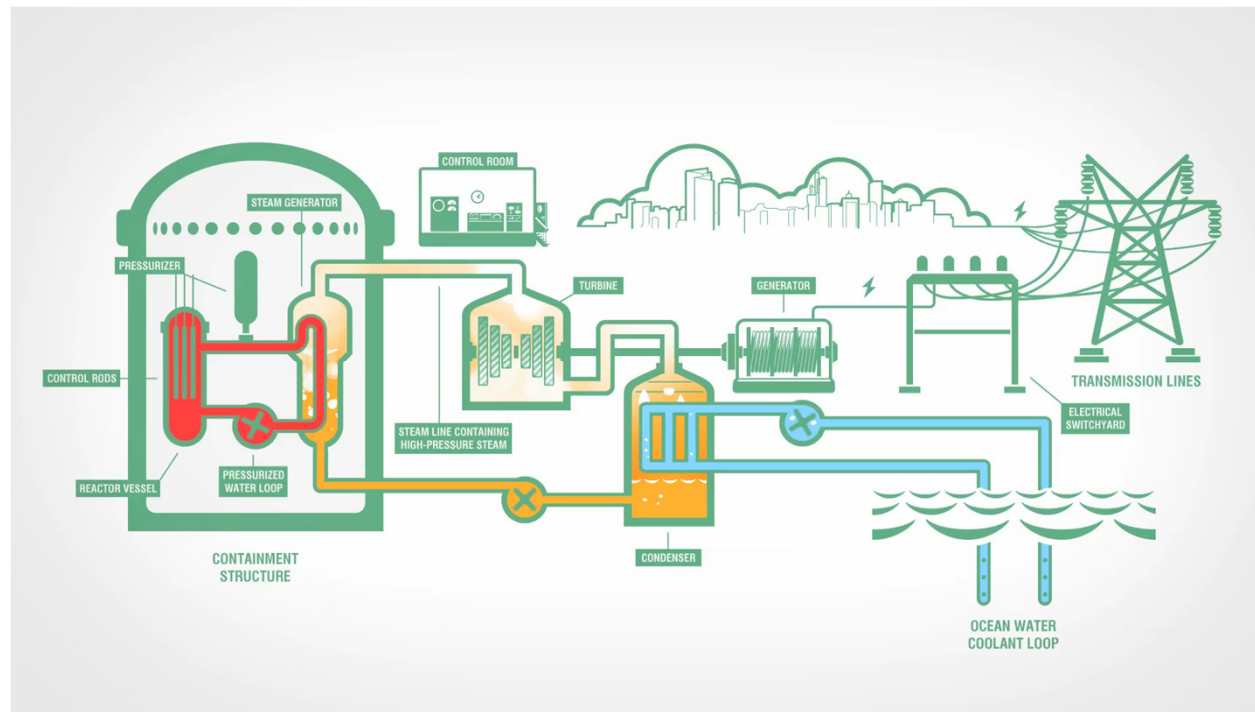


Powering the Future: Barakah Nuclear Energy Plant

Prime Contract and Technology

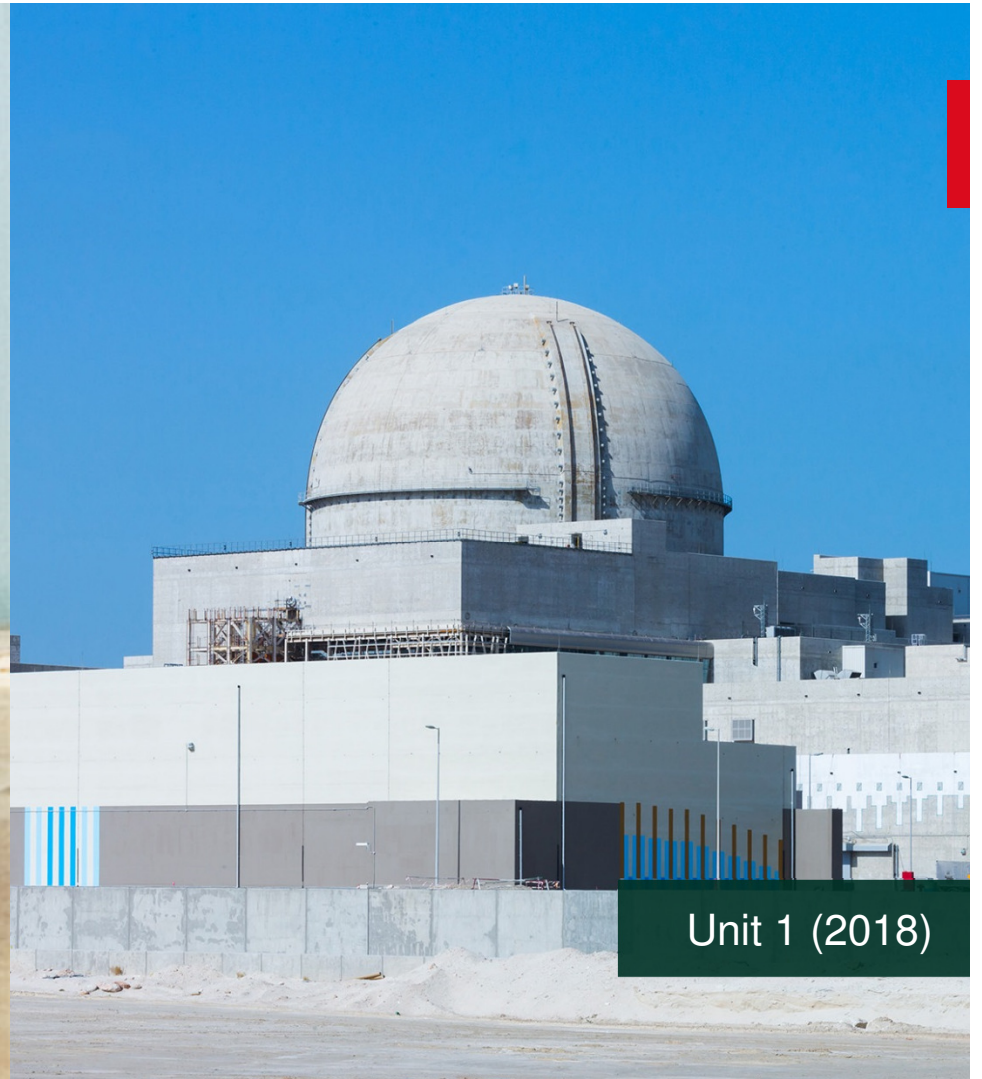
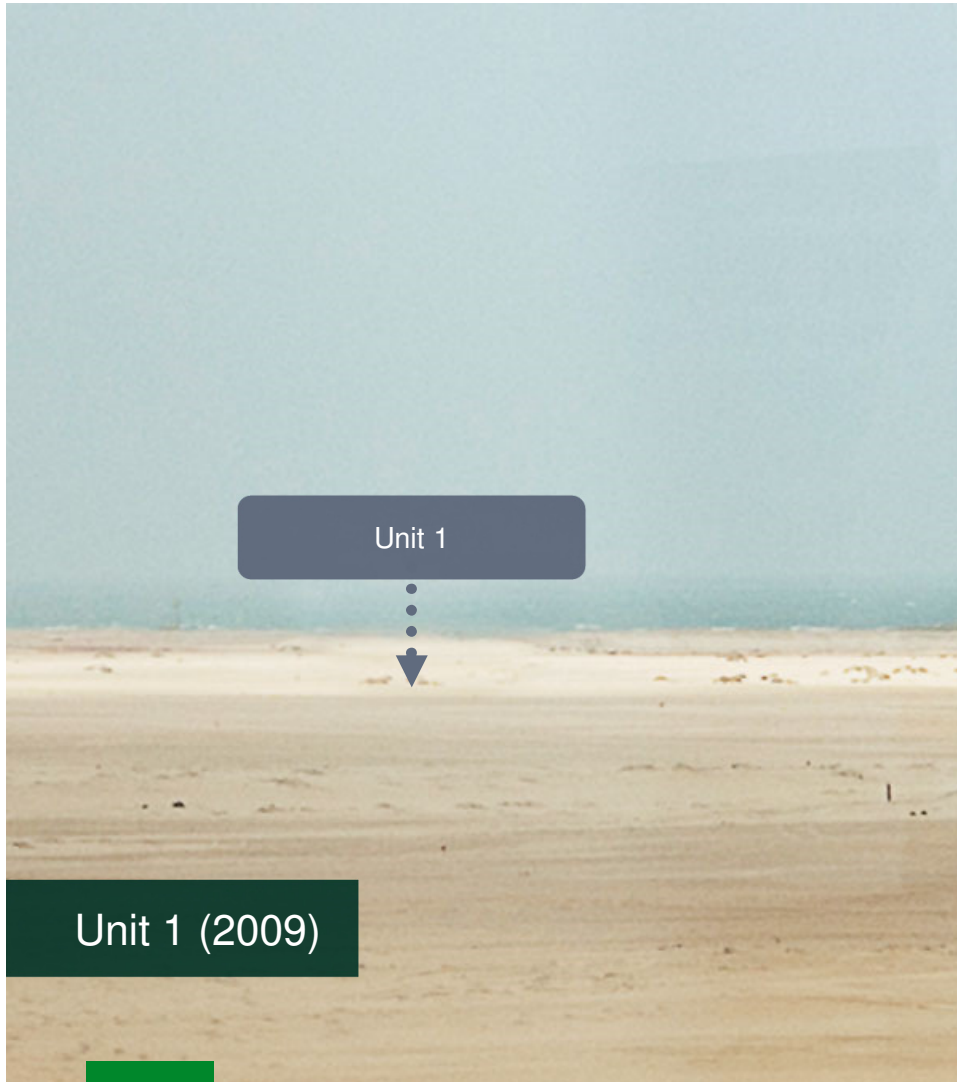


How to Nuclear Power Plant Works



The Barakah Site







Overall completion of the four units: 87%
as of February 2018

Initial construction work - November 2012



Unit 1 - March 2013



Unit 1 & 2 - November 2014



Unit 3 & 4 - February 2015



Units 1 to 4 - October 2016



Units 3 & 4 – March 2017



Units 1 & 2 – January 2018



Units 3 & 4 – January 2018



Unit 4 – January 2018



Units 1 to 4 – January 2018




Units 1 to 4 – January 2018



Units 1 to 4 – January 2018





Turbine Building

The image shows the interior of a vast industrial facility, likely a power plant. The ceiling is high and features a complex network of white steel trusses and beams, with numerous lights hanging from it. The walls are also made of steel, with large windows on the right side allowing natural light to enter. In the center of the room, there is a large, green, rectangular structure, possibly a turbine or a large storage tank. To the left and right of this central structure, there are intricate systems of pipes, valves, and machinery. A yellow overhead crane is visible in the background. In the foreground, there is a metal railing and a small sign that reads "WEAR SAFETY BELT WHILE WORKING AT HEIGHT". A person wearing a hard hat and safety gear is visible on the right side of the image.

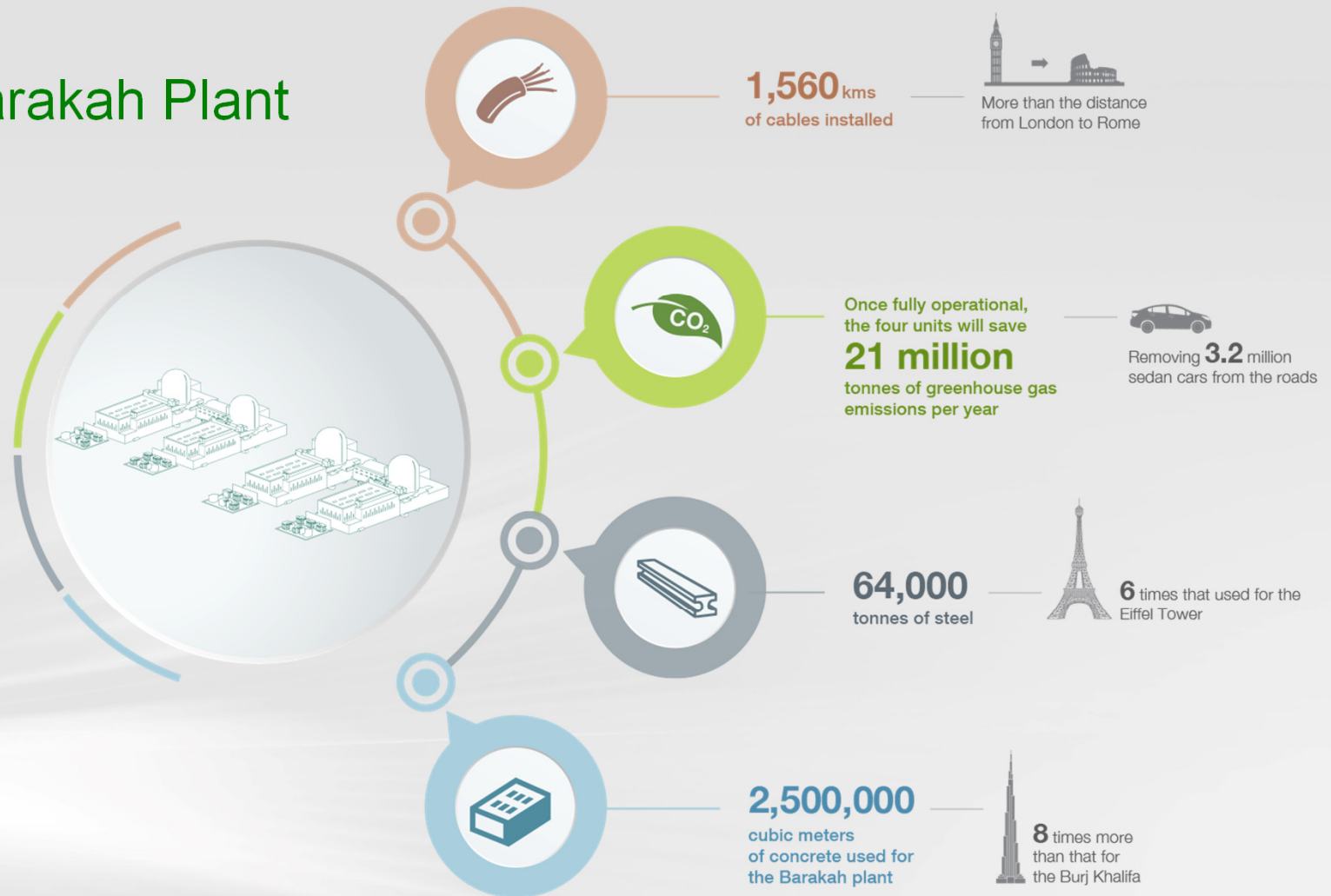
Working at Barakah NPP



Construction Completion Ceremony



The Barakah Plant





Economical and Social Benefits





Our Skilled Workforce

- ENEC and Nawah currently employ over 2,500 people
- Around 60% are local Emiratis
- 40+ nationalities
- 20% women

Developing Skilled Professionals

- 156 students currently studying through an ENEC-sponsored program
- Over 500 graduated from a program through an ENEC scholarship
- 55 reactor operators in training





Industrial Development

- Developing a local nuclear value chain
- Promoting industrial development
- More than \$3.5 billion (AED13 billion) awarded to local companies
- Over 1,400 UAE companies involved in the project
- Quality and safety standards raised to nuclear-industry level

Leadership Support





Conclusion

- Working with the full support and confidence of the international community
- Building on the most rigorous standards of safety, transparency and security
- Instilling a culture of continuous improvement
- Powering the future growth and prosperity of the UAE





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