مؤسسة الإمارات للطاقة النووية
Emirates Nuclear Energy Corporation

Strategy For Creating a UAE Nuclear Industry

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Safety Moment

A safe plant is a reliable plant

A reliable plant depends on a suitably qualified, experienced and responsive supply chain

A suitably qualified, experienced and responsive supply chain requires a degree of services to be local

THE UAE PEACEFUL NUCLEAR ENERGY PROGRAM

About ENEC

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 UAE energy strategy.

Vision

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

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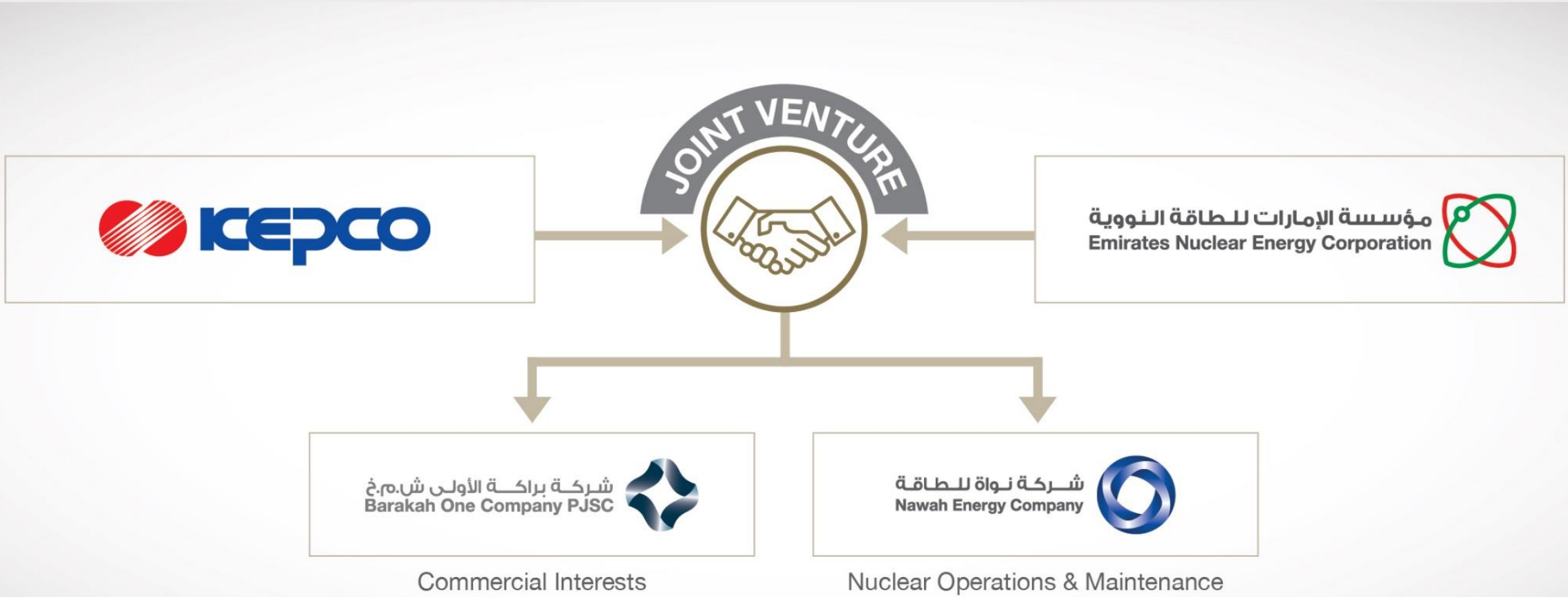
The Joint Venture



The Subsidiaries

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

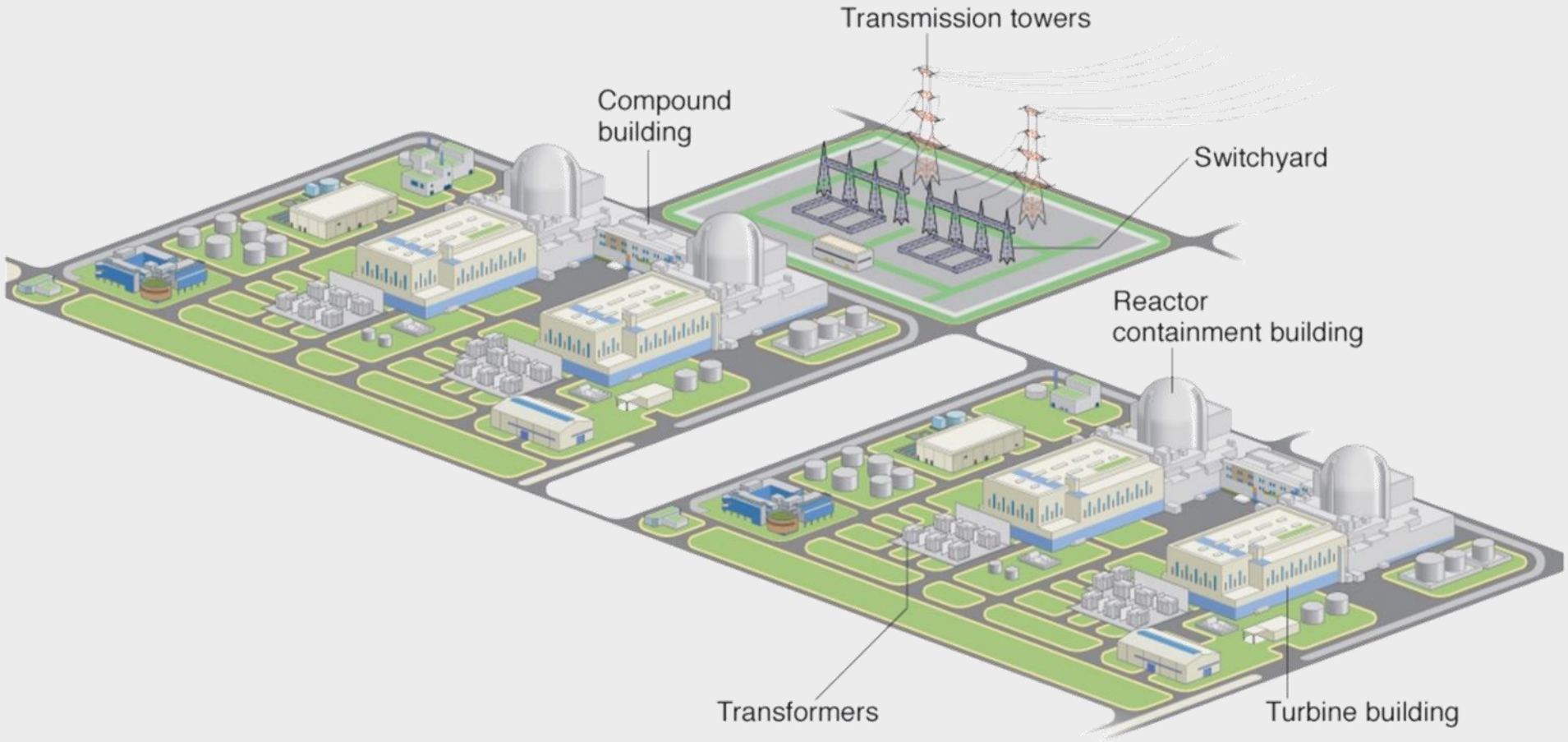
- Represents commercial interests of Barakah project
- Sells electricity to ADWEC through the Power Purchasing Agreement
- Manages commercial relationship with lenders

شركة نواة للطاقة
Nawah Energy Company

- In charge of operating and maintaining Barakah Units 1-4
- Will hold the Operating License
- Emirati-led, multinational and multicultural organization with around 40 nationalities

The Barakah Site

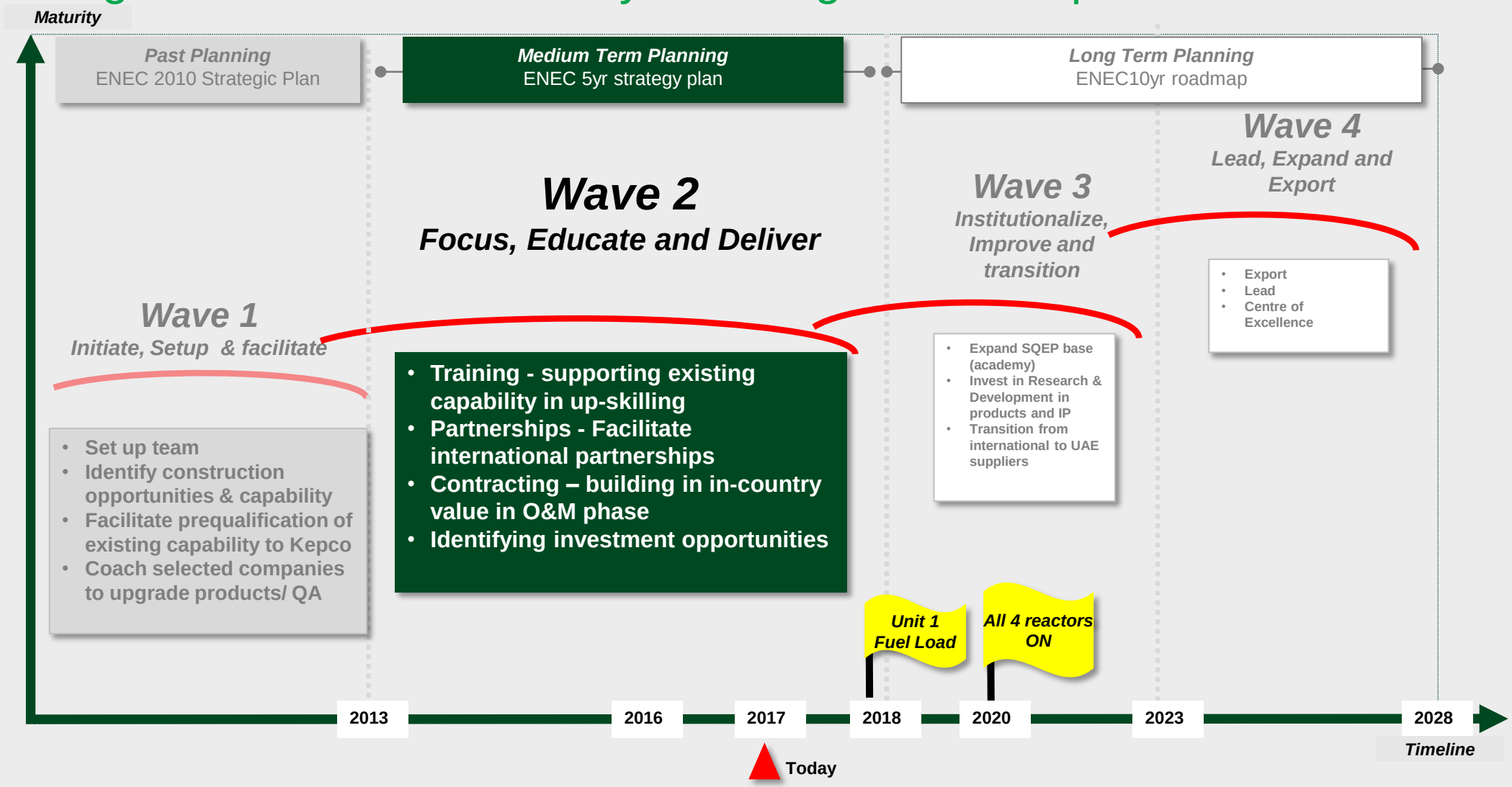
Prime Contract and Technology



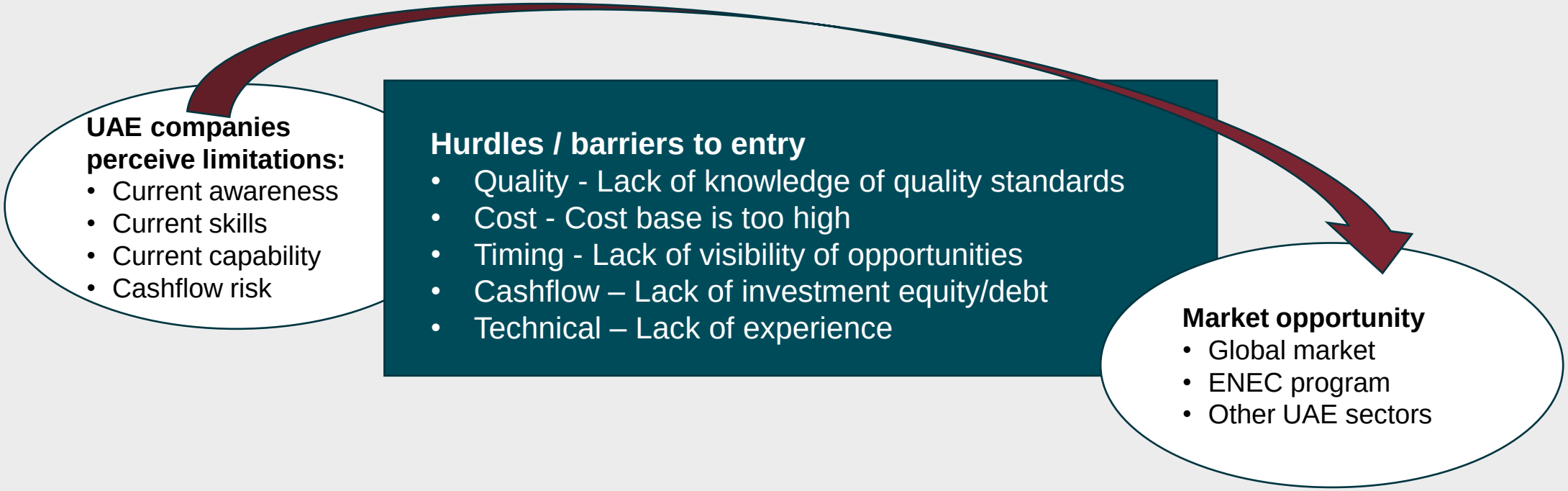
Overall completion: 84% (As of end-September 2017)

CREATING A UAE NUCLEAR INDUSTRY

Creating a UAE Nuclear Industry - Strategic Roadmap



Hurdles for Local Suppliers to Overcome



Enablers to Overcome Barriers

Enablers
- Quality – partnering/ coaching / training…
- Cost – grants, equity, tax breaks, low cost land/ rent…
- Timing – awareness of procurement timetable…
- Cashflow – loans, investment…
- Technical – acquisition/ partnering/ training…
- Incentives – scoring, obligations

UAE companies
- Current awareness
- Current skills
- Current capability
- Cashflow risk

Market opportunity
- Global market
- ENEC program
- Other UAE sectors

4 Elements to ENEC Strategy

Training (barrier – quality, experience)
- Identify specific 3rd tier UAE potential suppliers and provide direct training on QA/QC requirements
- Establish an 'ENEC Nuclear Industry Academy' to provide training in technical, commercial and management systems
- Coach on market opportunities, synergies across markets in respect standard requirements and project awareness

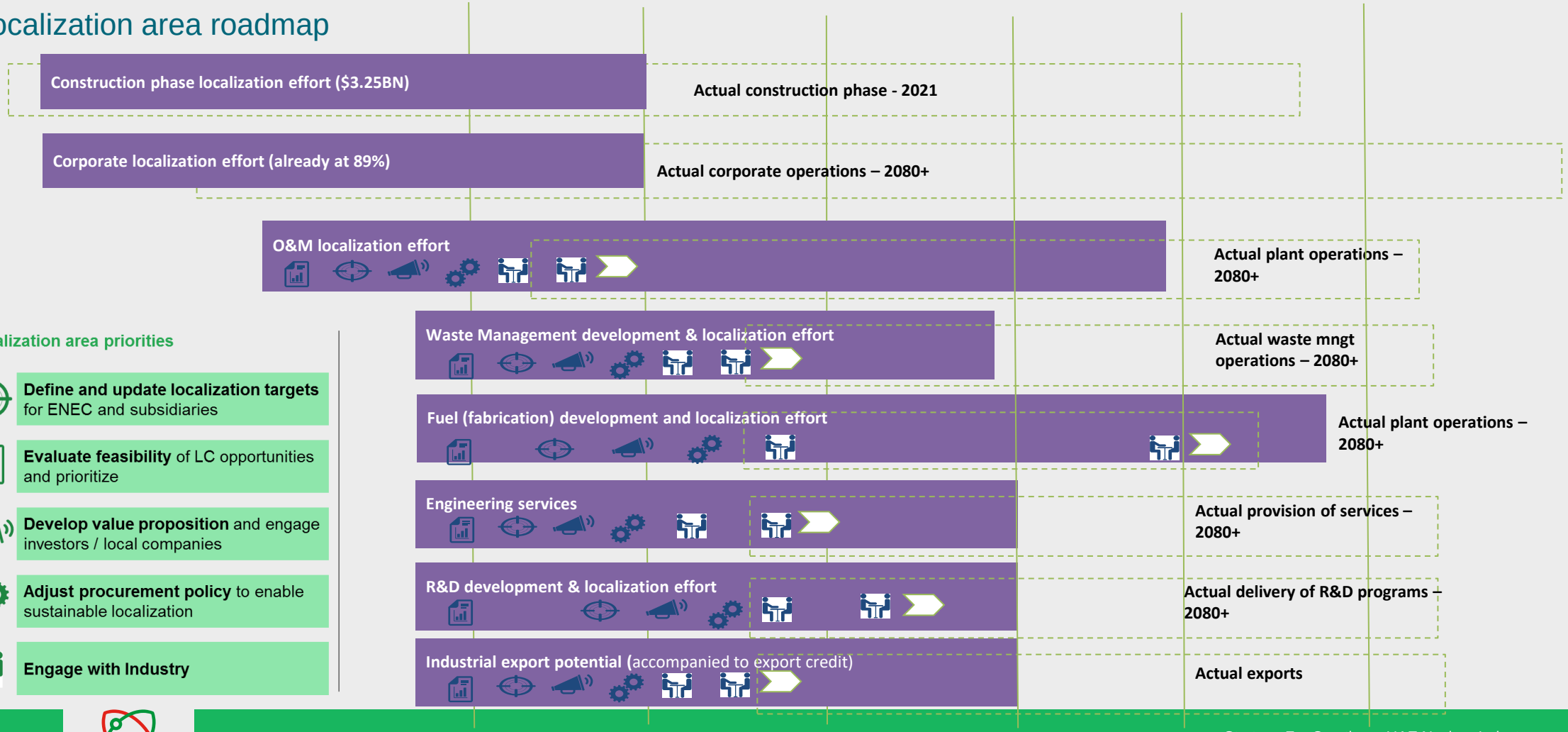
Partnering (barrier – experience)
- Foster partnerships between UAE companies and international experienced suppliers to the nuclear industry
    - Pumps, valves, heat exchangers, cables, testing & calibration, support services…

Contracting Strategy (barrier - cost, timing)
- Raise localization as a strategic imperative in the ENEC/Nawah procurement strategy
- Introduce incentivization mechanisms into tenders to increase inward investment and partnering eg.
    - Localization award criteria / targets
    - Staff rotation
    - Off-set

Investment (barriers - cost, investment)
- provide ENEC support to assist in provision of up-skilling, plant improvements, process improvements…
    - Grants, loans. equity etc
    - Managed by ENEC
    - Applications approved by ENEC
    - Performance managed by ENEC

Evaluating and defining localization proposition and priming local suppliers has to come before implementation to optimize local content

Localization area roadmap



Strategic Outcomes

- Responsive supply chain
- Diversification of supply chain (greater competition, less single point failure)
- ENEC supply chain that is less exposed to external issues (currency fluctuations, international politics, shipping, split priorities)
- Creation of direct job opportunities for Emiratis
- Enhance and diversify UAE industry (help meet 2030 vision and 40% GDP via non-oil & gas)
- Multiplier effect to GDP on all jobs created
- Retention of profit in country and creation of wealth
- Lower cost for ENEC and the UAE Peaceful Nuclear Energy Program as a whole

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Thank You