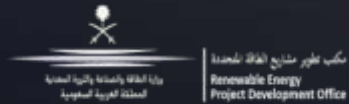


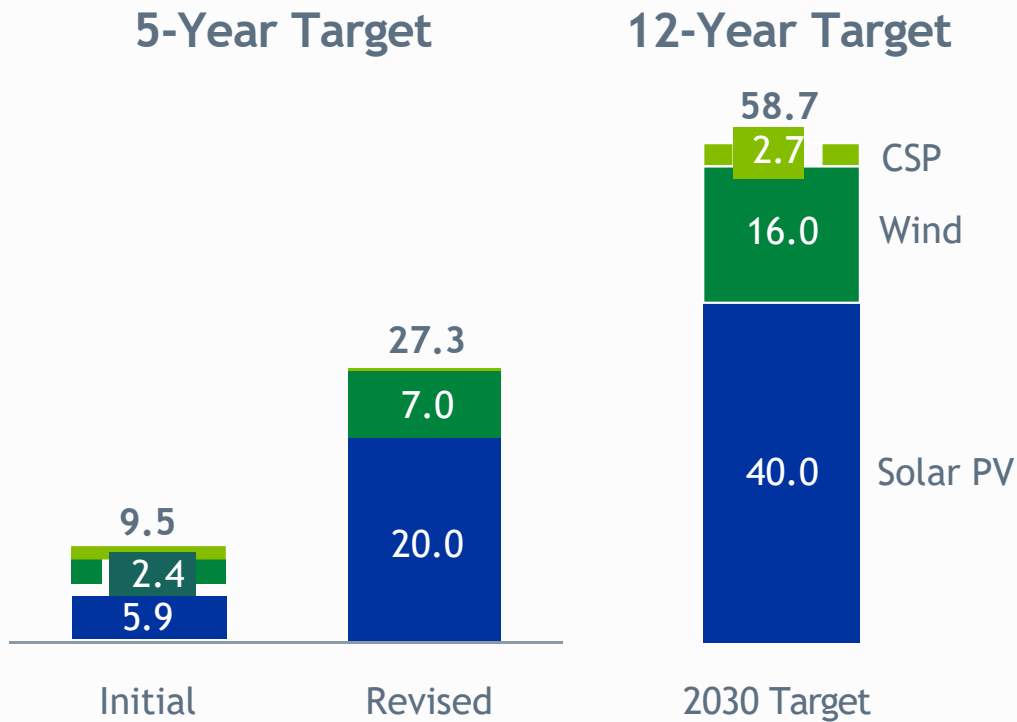


Saudi Arabia National Renewable Energy Program



Saudi Arabia significantly increased its renewable energy targets and long term visibility

Planned Capacity (GW)



Increased
5-Year Target



Extended visibility
to 2030



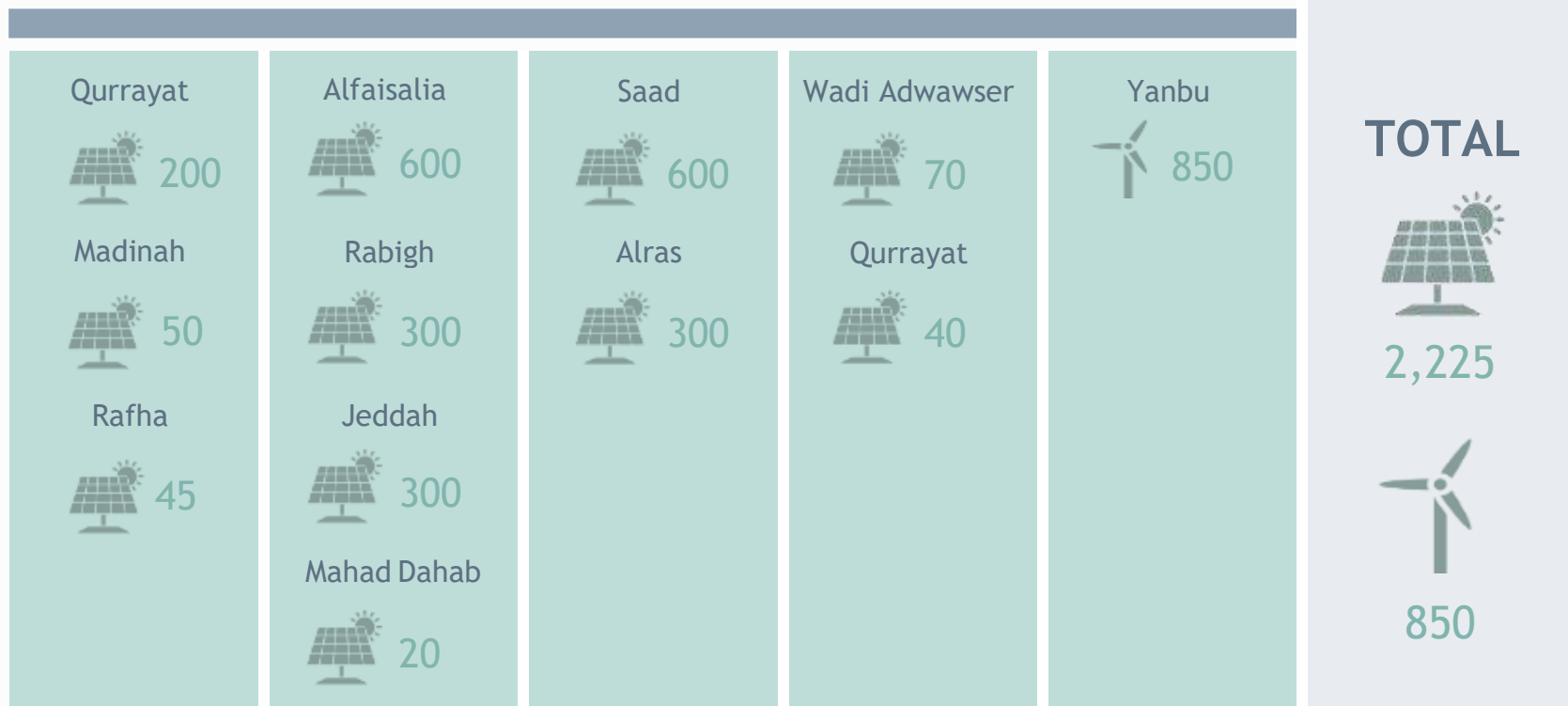
Optimized
the energy mix



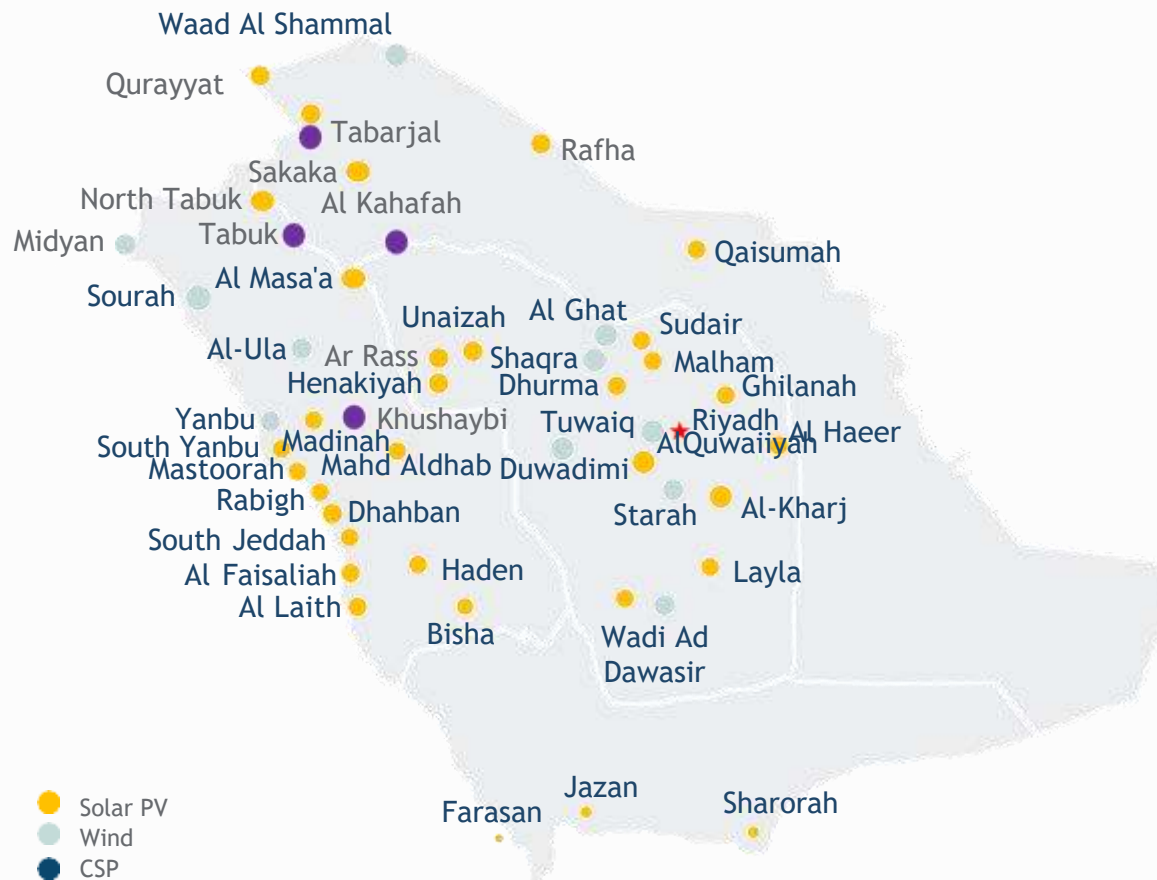
Manufacturing
capacity of 200GW by
2030



12 pre-developed projects will be tendered in 2019 with a total capacity of ~3.1 GW



Projects will be deployed in 35+ parks spread across the Kingdom



35+ parks
to be developed by 2030



Spread across
the Kingdom to promote
regional development



Gradual deployment
to mitigate technology risk

What is Pre-Development?

Pre-development activities provide certainty and deliver lower project costs

- Input to tender
- Reduced risk
- Successful IPP
- Lower LCoE



Framework for Developing Tendering Policies



Qualification

- Technical and financial criteria



RFP

- Local Content requirements
- Prescriptive technical parameters of the plants (location, size, technology)
- Bank Guarantees, EPC term sheets, O&M term sheets, financial model



Evaluation

- Public bid announcements
- RFP compliance and than lowest LCOEE



Award

- Short listing and than award. No alternative bids or negotiations



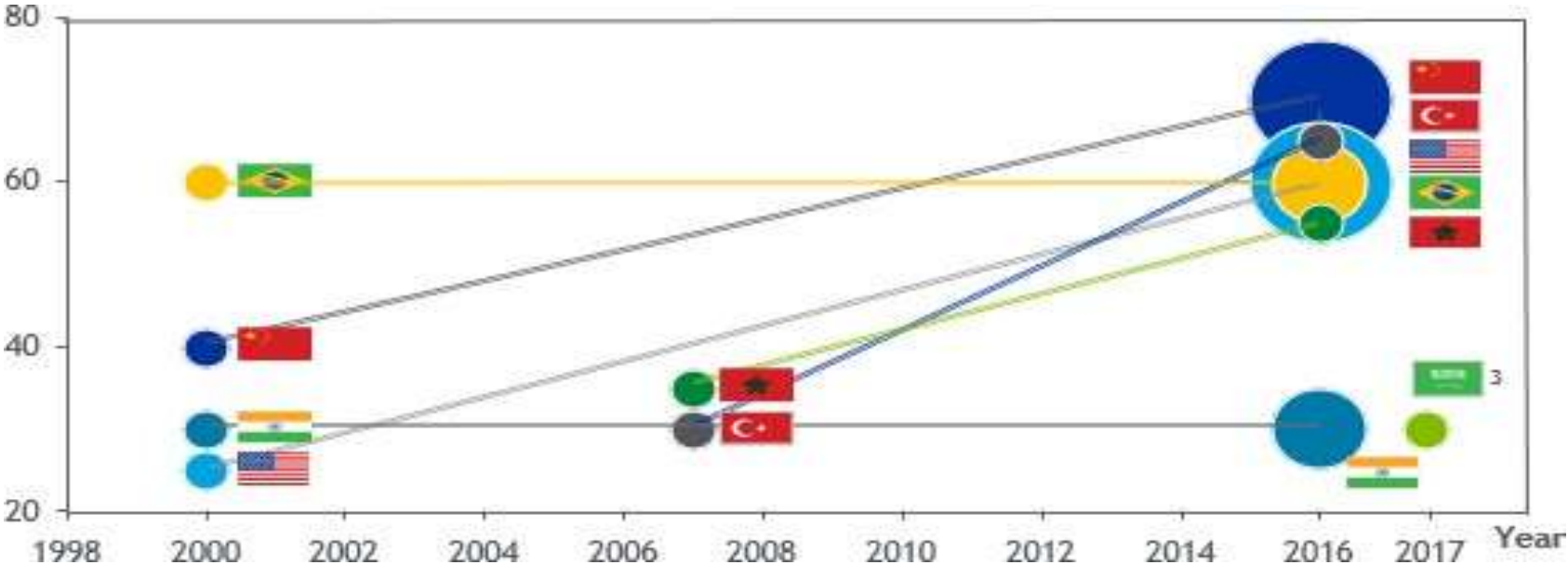
Saudi Arabia Localization Objectives



مكتب تطوير مشاريع الطاقة المتجددة
Renewable Energy
Project Development Office



Global Local Content Benchmarks



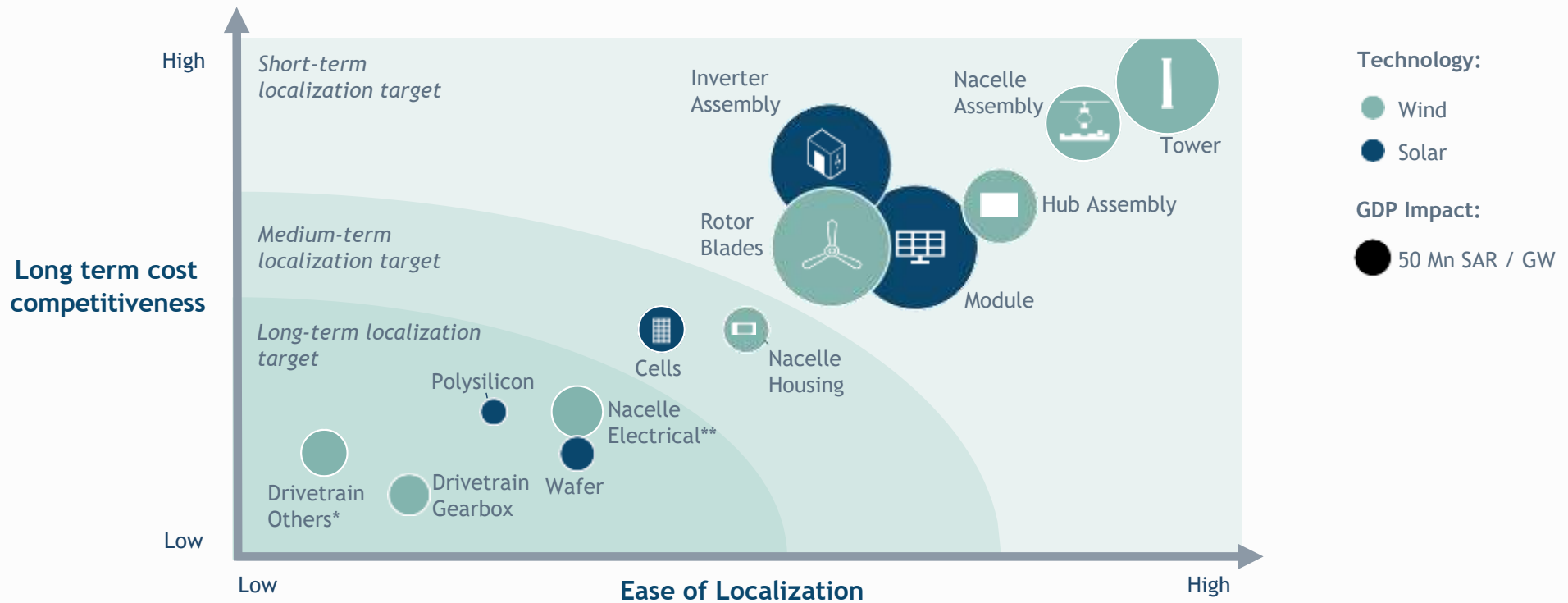
Bubble size - Installed Renewable Energy Capacity (GW):

- <10 GW
- 10-100 GW
- >100 GW

MEIM and PIF are working on complementary tracks to promote localization of manufacturing

Track	Development Approach	Allocated Pipeline (% of RE Capacity)	Objectives
Tendered by REPDO	<ul style="list-style-type: none"> Competitive tender Increasing local content requirements 	30%	<ul style="list-style-type: none"> Enable price discovery Attract private investments Promote market innovation
Awarded to PIF	<ul style="list-style-type: none"> Negotiated deal with international partner for project development Captive offtake from large scale manufacturing (200 GW) 	70%	<ul style="list-style-type: none"> Fast-track localization Target exports of RE equipment Develop Giga-scale projects

What Do We Want from Local Content



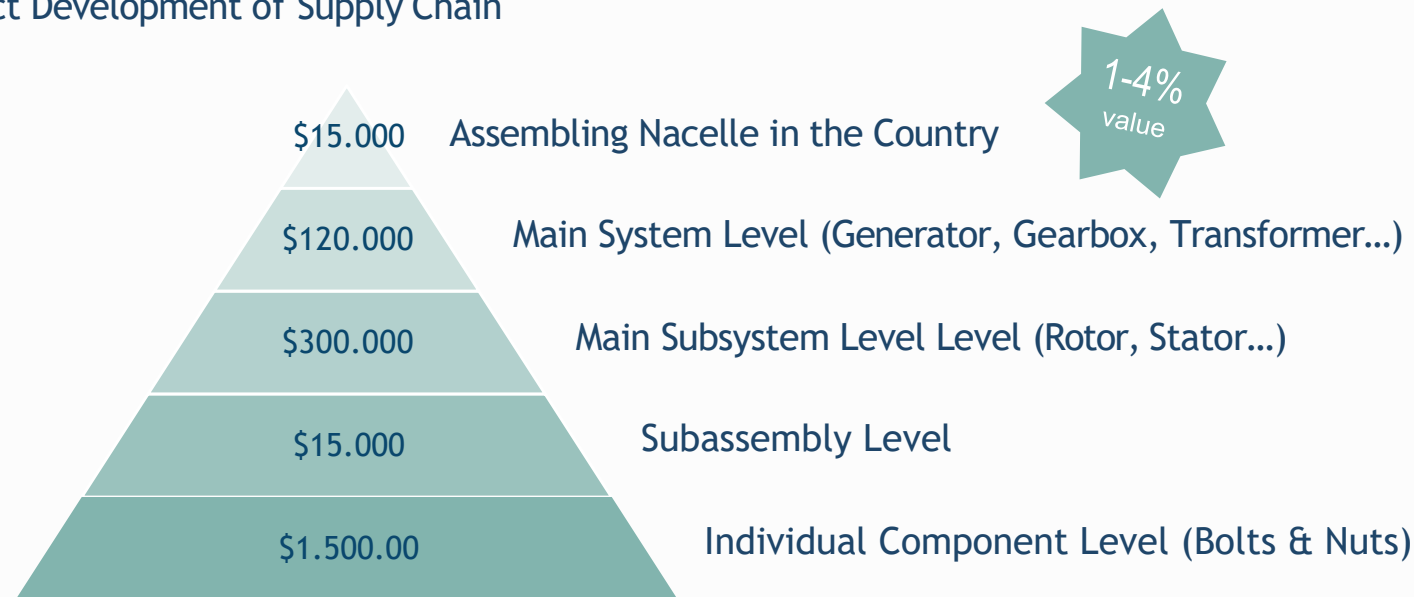
Notes: *) Rotor Bearings, Break System, and Main Shaft; **) Power Converter, Transformers, and Fiber-optic Cables

What Do We Want from Local Content

Competitive and Sustainable Industry

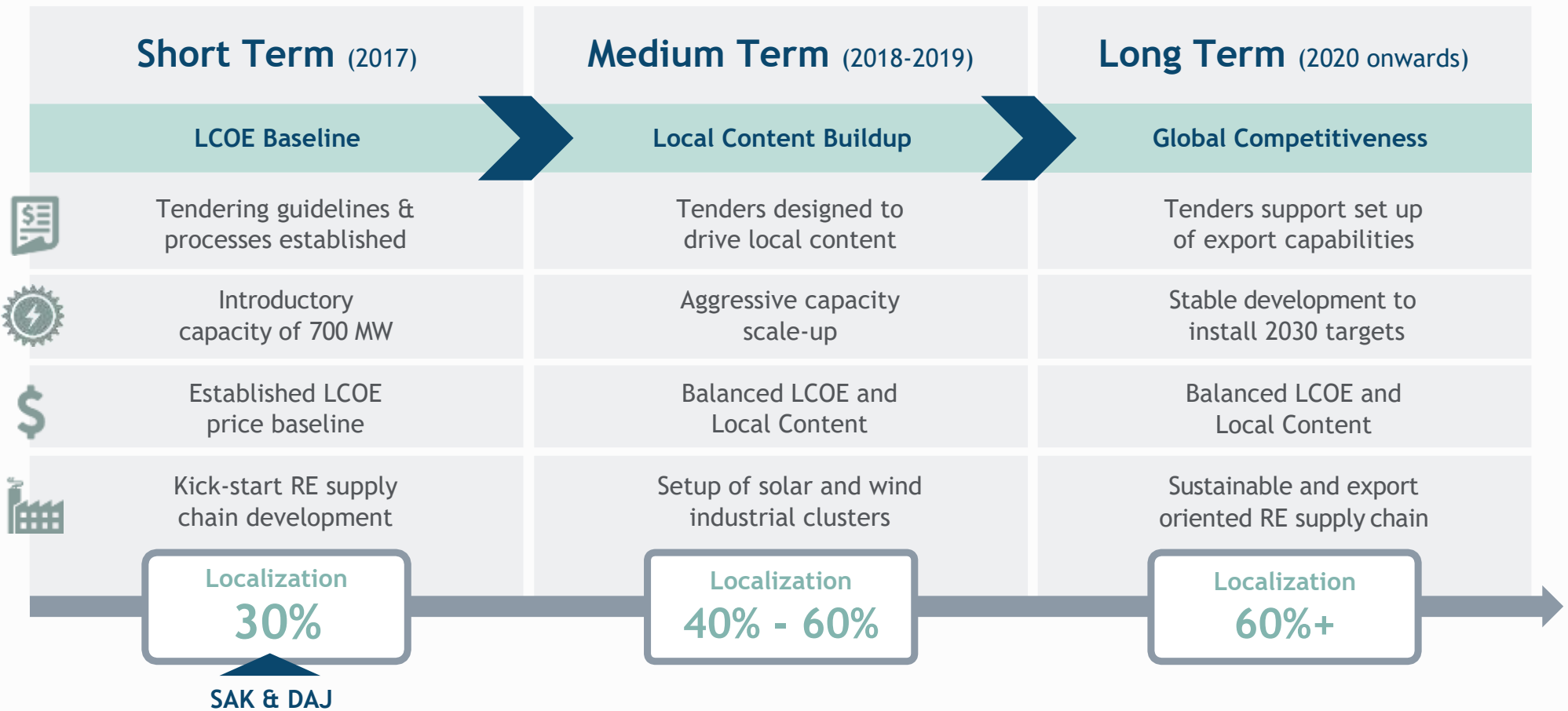
Value Localization Strategy Approach

- Promote Factory localization
- Expect Development of Supply Chain



Captured Value Pyramid

Local Content Roadmap



Source: Team Analysis