

PPP/IPP 1500MW CORPORATIZATION & RESTRUCTURING OF EDL

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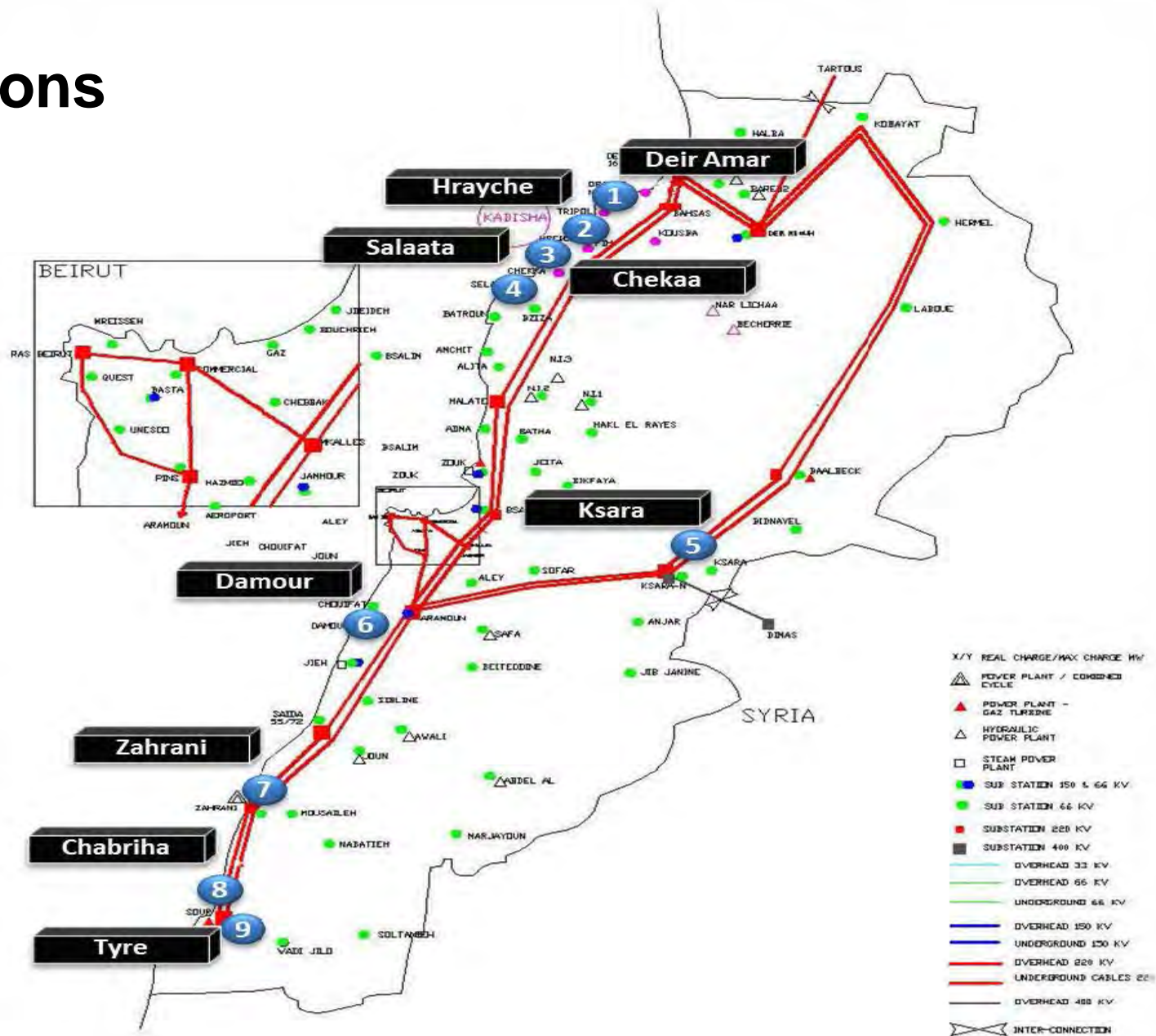
AGENDA

- ❑ **PPP/IPP 1500MW**
- ❑ **Corporatization and Restructuring of EDL**
- ❑ **Q/A and Panel Discussion**

PPP / IPP 1500MW

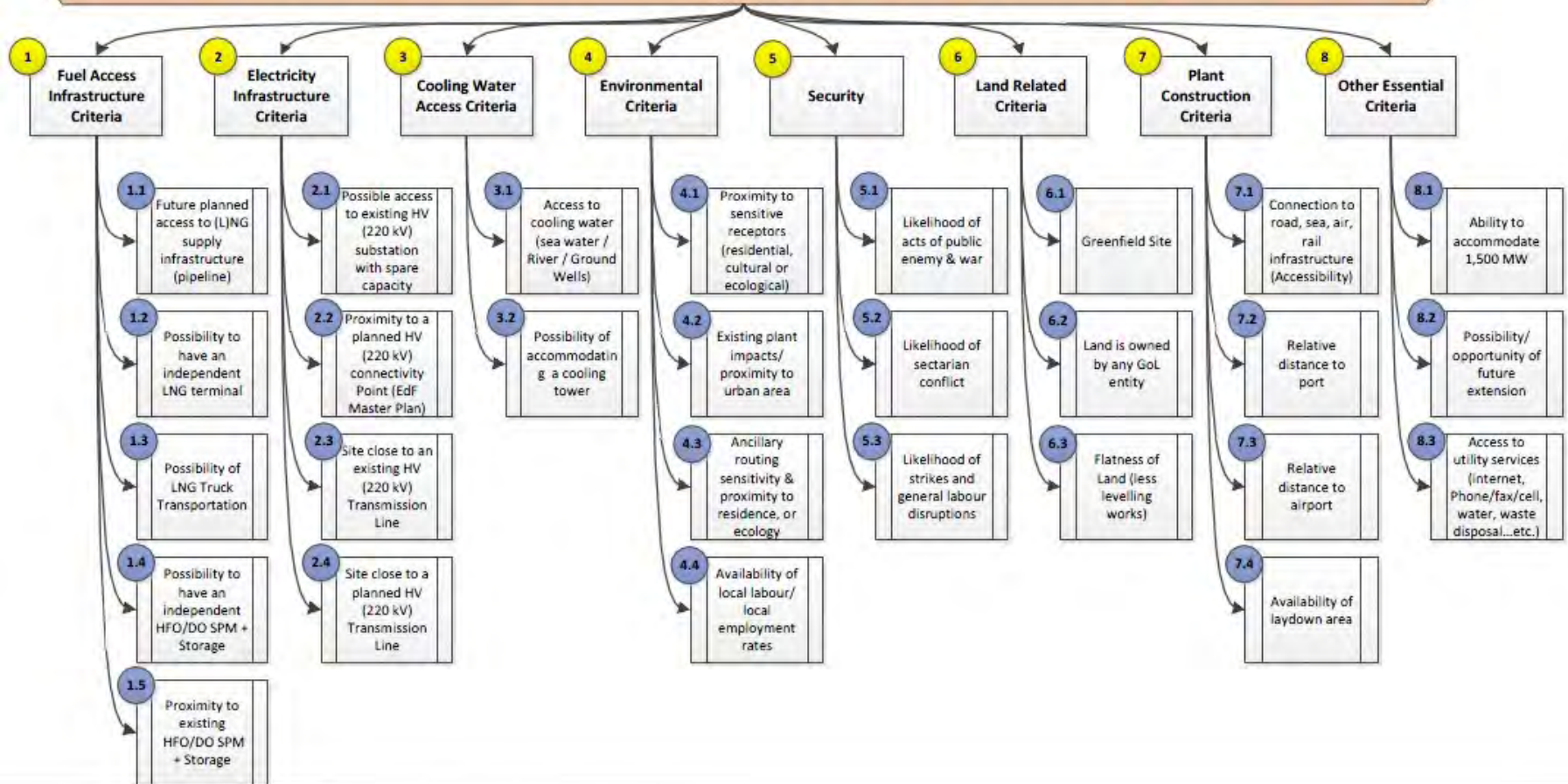
Sites locations

A long list of 9 potential sites was established based on GIS survey and input from various reports and delegates



A Matrix of 8 main criteria and 27 sub-criteria was used to conduct the evaluation of each site.

Main and sub-criteria of the Decision Making Matrix to be used in site filtration



Short-listing of sites

Table 6.4: Round-2 evaluation results (tabulated)

Rank	Site	Score	P/F
1	Zahrani	98.3%	Suitable
2	Salata	88.8%	Suitable
3	Damour	79.2%	Suitable
4	Chekaa	77.1%	Suitable
5	Deir Amar	76.1%	Suitable
6	Chabriha	72.5%	Unsuitable
7	Hrayche	70.2%	Unsuitable
8	Tyre	65.1%	Unsuitable
9	Ksara	63.7%	Unsuitable

- Zahrani ranked 1st, (Ready Immediately)
- Selaata 2nd, (Need work, but easily done in parallel)
- Damour 3rd, (Need more work to be ready)

Fuel Sourcing Strategy

Fuel sourcing risk should be born by the government which should consider diversity between NG and HFO for security of supply

NG

is the primary fuel

- Imported as LNG through a regasification terminal.
- Distributed to power plants through the costal pipeline.
- **Risk of the reliable supply in quantity and quality is on the GoL**

HFO

is the secondary fuel

- Cost/Benefit analysis revealed that HFO is the appropriate economic secondary fuel compared to DO
- IPP plants will have to fire HFO instantly upon unreliable supply of NG
- HFO is internationally sourced, treated and distributed to onsite storage.
- **Risk of the reliable supply in quantity and quality is on the GoL**

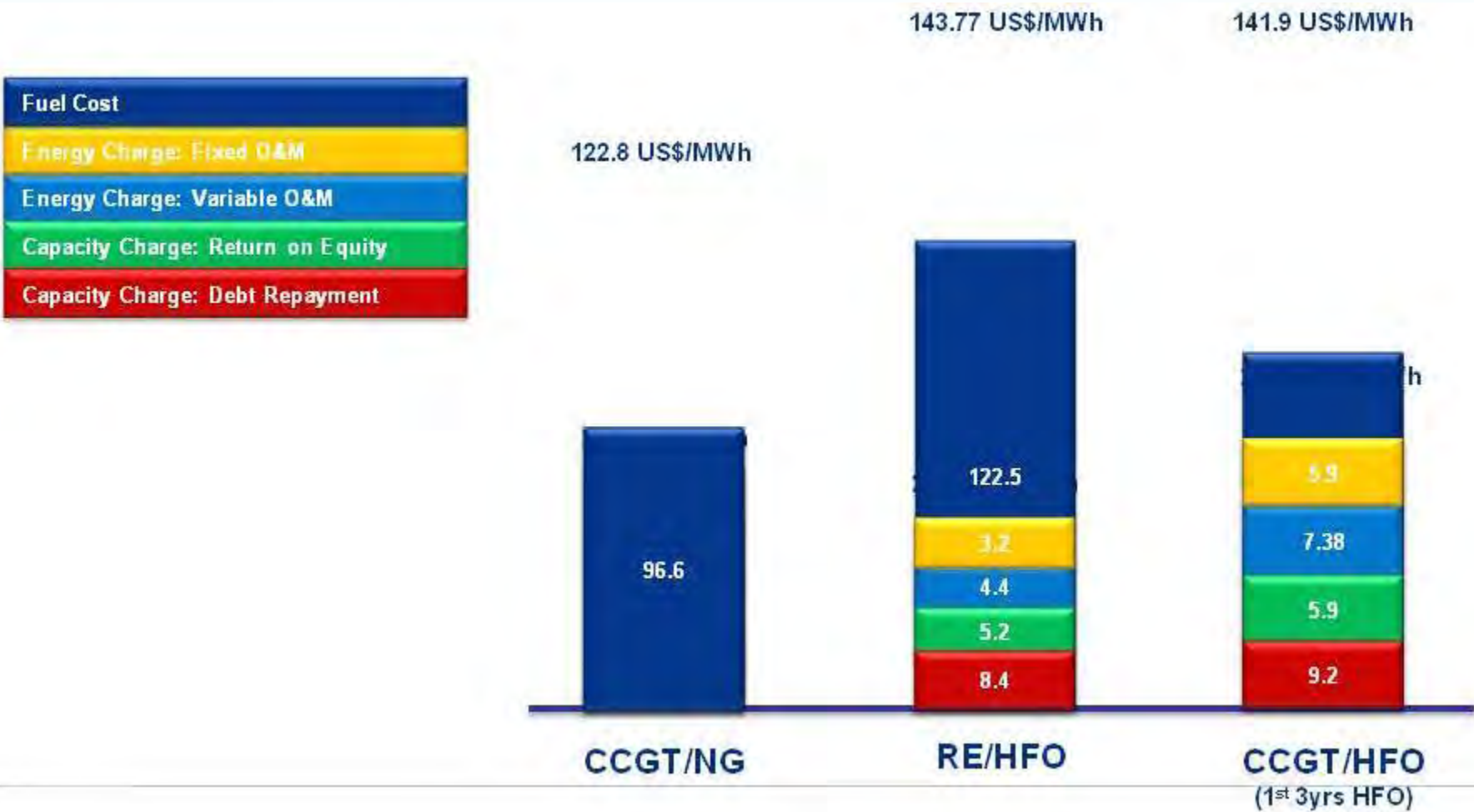
DO

is the backup fuel

- DO shall be used only when the secondary and primary fuel are not available. DO is also a startup fuel when firing HFO.
- DO is internationally sourced and can be accessed reliably from the local market
- **Risk of the reliable supply in quantity and quality is on the Developer.**

Based on that, and part of diluting fuel supply risk, it is recommended that all power plants that are constructed in Lebanon under the IPP scheme should be dual-fuel fired (NG, HFO) combustion technologies and DO as a backup, otherwise the non-availability of NG would threaten the sustainability of the project, exposing the GoL to a substantial financial risks.

Technology Mix and Indicative Levelized Tariff (US\$/MWh)

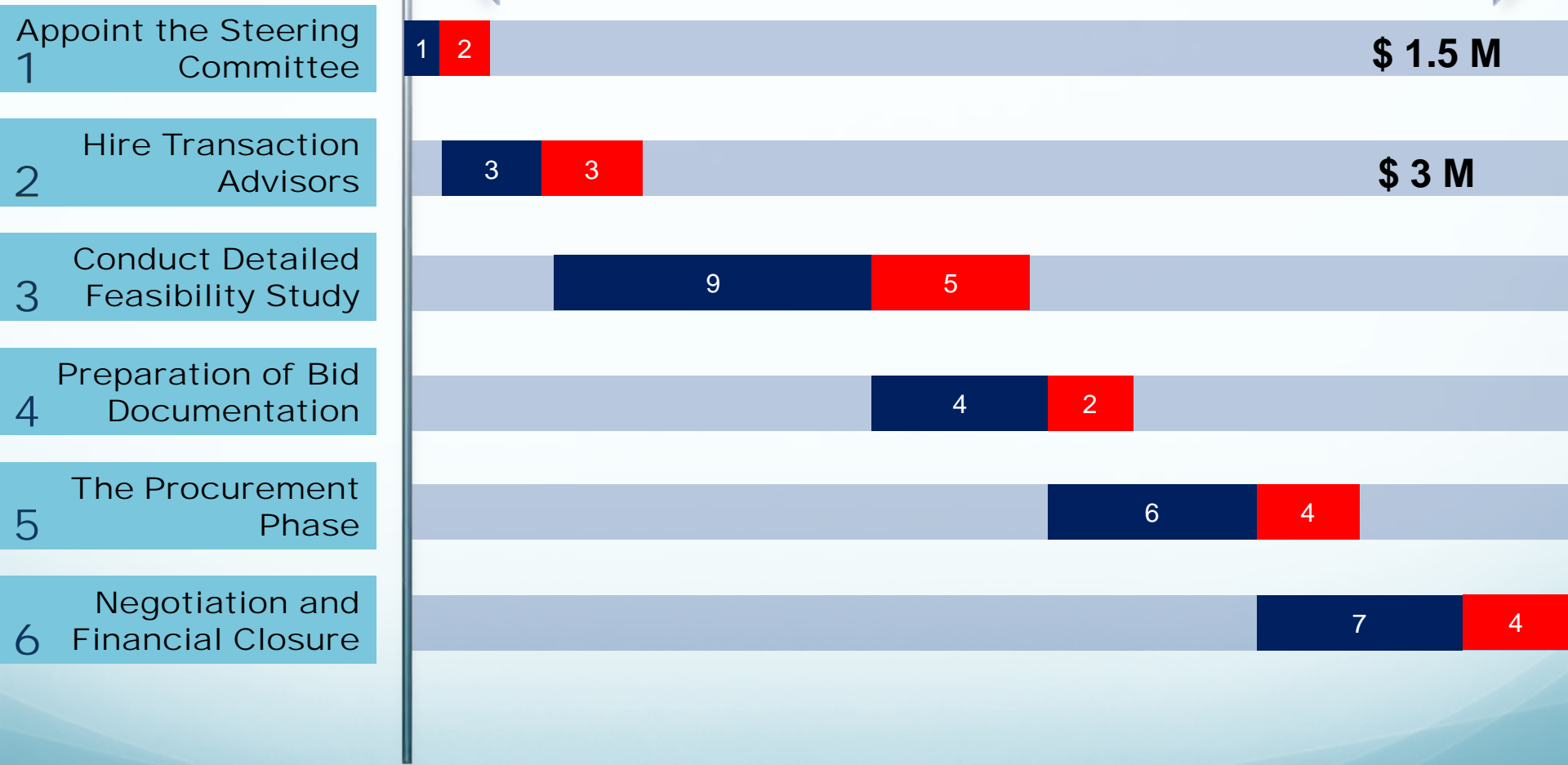


Recommendations:

An IPP in the range of 500 MW more suitable as first IPP:

- **It allows for a phased approach**
- **Distributes capacity on a number of sites**
- **Shall serve as a template for future IPPs**
- **More appealing to Investors and developers**

IPP Roadmap

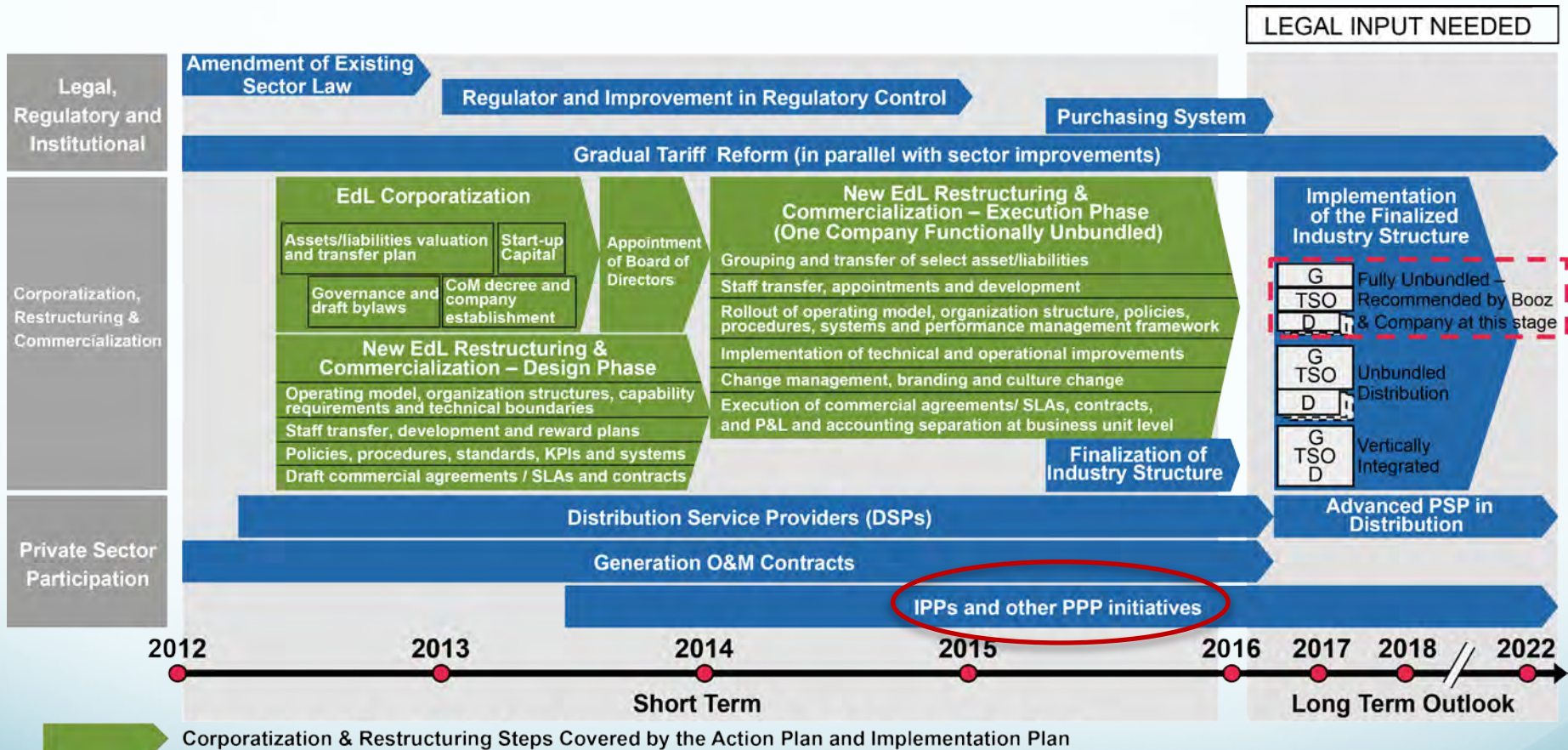


Corporatization and Restructuring of EDL

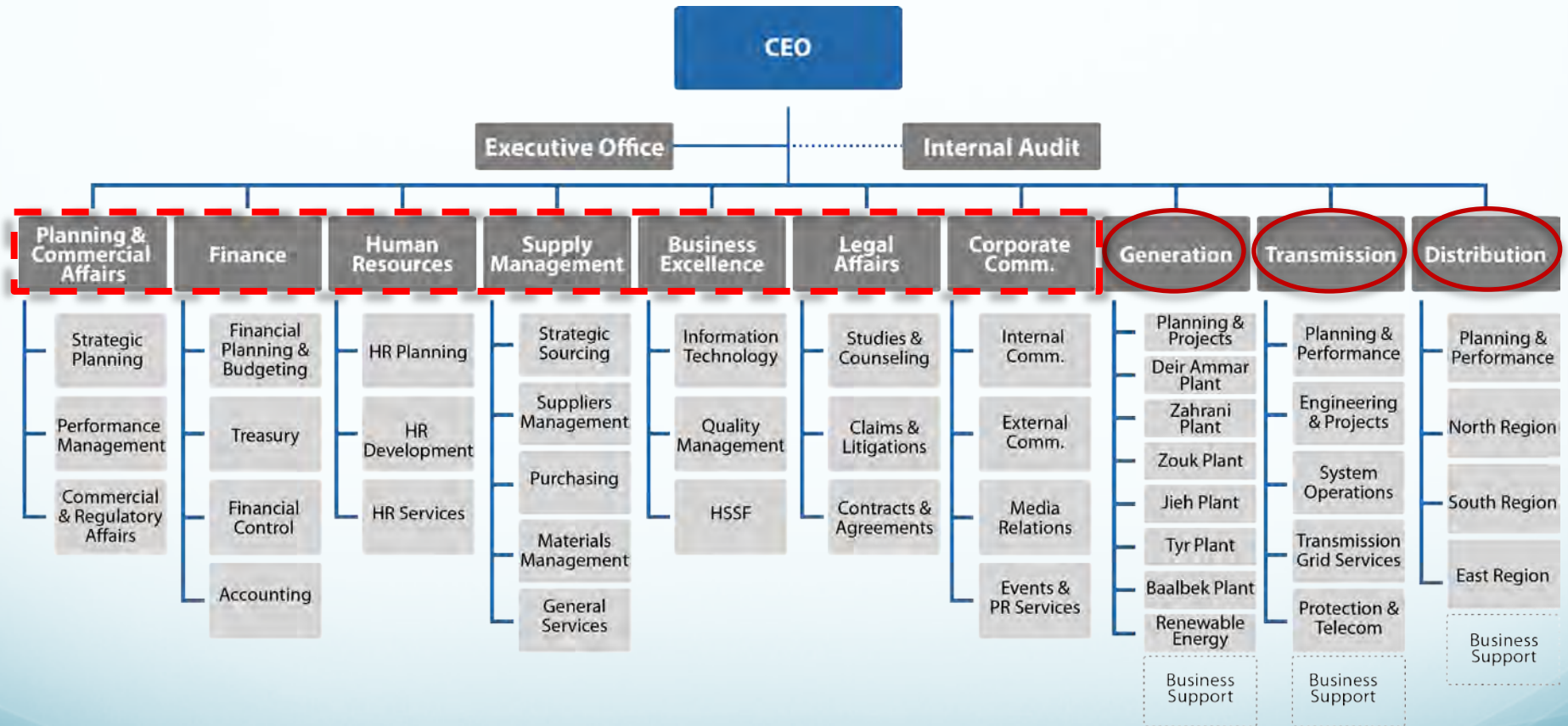
Standard “textbook” Model for Electricity Sector Reforms



Roadmap steps and estimated timeline



Organizational Structure and Strategic Business Units



Twelve main Initiatives for EDL corporatization and restructuring

FOR DISCUSSION
LEGAL INPUT NEEDED



The preliminary budget for executing corporatization and restructuring initiatives is estimated at ~ USD 32 Million



This budget does not account for employee costs due to service termination remuneration & end of service compensation. These costs should be agreed upon prior to corporatization.

* Overlap with the PPAs and structure required for an IPP



Thank You!

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