

Privatization & Outsourcing of Water & Waste Water Facilities

An Overview of One Form of Privatization: Build Own Operate (BOO) and Build Own Operate and Transfer (BOOT) Contracts

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PRESENTATION OUTLINE . . .

- **Company Overview**
- **Build Own Operate (Transfer):**
 - Some Terminology
 - Basic Model
 - Risk Allocation
 - Tariff Options
 - General Considerations
 - Demand Considerations
- **BOO Contract Overview**
 - BOO vs BOOT
- **Privatization Trends**
- **Key to Success**



- Dubai-based company started in 2005
- Major shareholder (95%): Istithmar
- Minority shareholder (5%): Hyflux Singapore
- Water-related Utility Developer:
 - Potable Water Plants - Reverse Osmosis
 - Sewage Treatment Plants
 - Irrigation &/or Commercial Water
 - Networks & Collection Systems
- Priority Market: MENA
- Prefer long term Build Own Operate (BOO)
- Key clients: Nakheel, Jebel Ali Free Zone Authority



• The Palm Jumeirah

- 2 RO Plants - 64,000 m³ potable water
- Polishing plants - for cooling applications
- Sewage treatment plants
- Related collection & network systems

• Golf Estates

- 150,000+ m³ sewage treatment plant

Terminology . . .

Definition

- Many terms or acronyms are used to describe the same thing:

- ✓ Design, Build, Own Operate ("DBOO")
- ✓ Build, Own and Operate ("BOO")

Basically the same concept
There is a design element in both

- ✓ Design, Build, Own, Operate and Transfer ("DBOOT")
- ✓ Build, Own, Operate and Transfer ("BOOT")

Assets get transferred back
Usually after 15, 20, 25+ yrs
Otherwise identical concept

- BOO and/or BOOT contracts are not same as EPC or Design Build Contracts:

- ✓ Project Company (**Service Provider**) provides all the capital/funding in a BOO or BOOT
- ✓ Project Company owns and manages the assets
- ✓ Relationship between Project Company & Buyer of the output or service (called the Off-Taker) is set out in either a **Water Purchase** or **Concession Agreement**

Basic Model . . .

Model Elements



Service Provider Provides Dedicated:

- Design & Engineering
- Technology
- Financing
- Operations & Maintenance

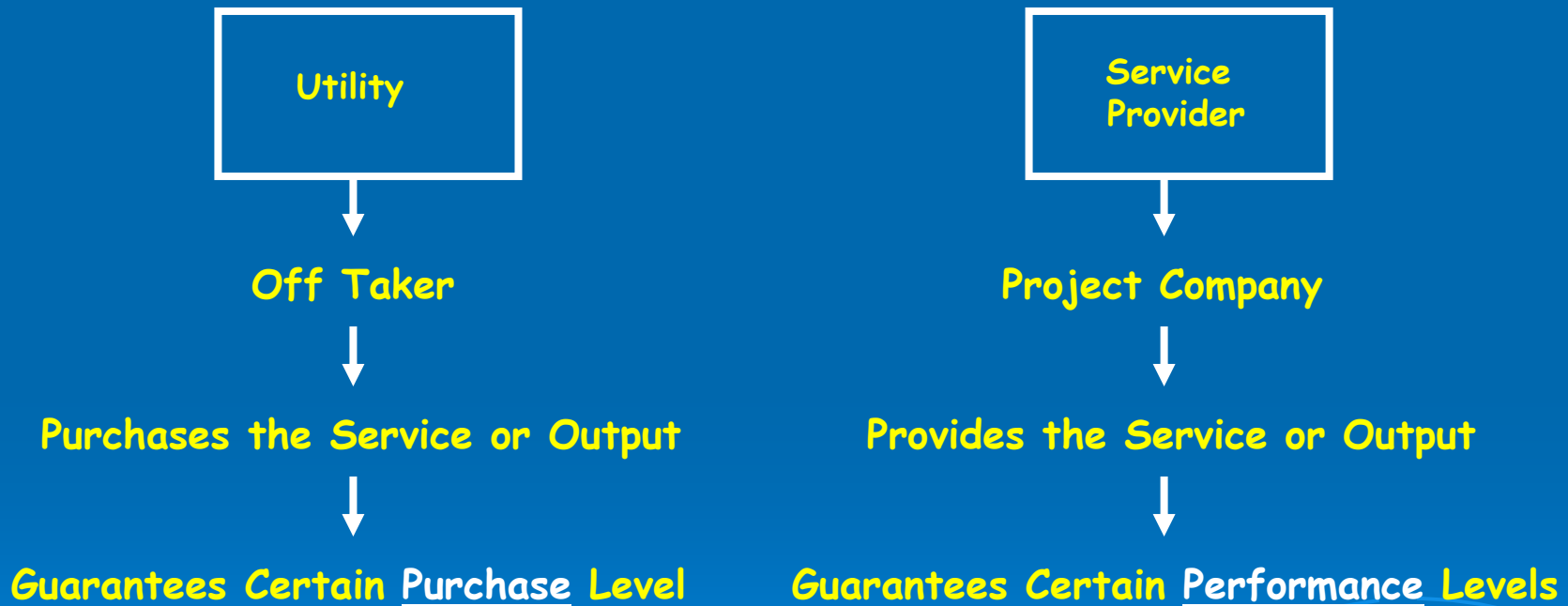
Works if:

- ✓ Agreements Bankable
- ✓ Fair Risk Allocation

Cost to Off-Taker = m^3 per day tariff

Basic Model . . .

Contractual Relationship



Benefits . . .

Benefits to Off-Taker and End User

- ✓ Frees up capital for other uses
- ✓ Frees up resources for other uses
- ✓ Allows company to focus on core business
- ✓ One-stop shopping for all services
- ✓ Negotiated competitive prices
- ✓ Dedicated service for end user/customers

Risk Allocation . . .

General Principles:

Issue: Which party bears what risk?

Practice: The party in the best position to mitigate the risk, bears it

Default position = End user or Off-Taker

Higher tariff if Project Company bears risk it cannot mitigate,

This practice is established in MENA
- user pays for any additional costs

Project Company can take more risk but only if tariff is higher to offset the risk

Normal starting point is to agree on risk allocation

General Principles

Bankable agreements needed:

- to raise debt financing
- commensurate with investor risk/return trade-off

If agreements not bankable:

- no debt financing - financed via equity only
- higher tariff (to compensate equity investors)

Eg: New corporate tax,
higher land charges
More stringent
water or sewage standards

Eg: Membrane Replacement,
Maintenance, Chemicals

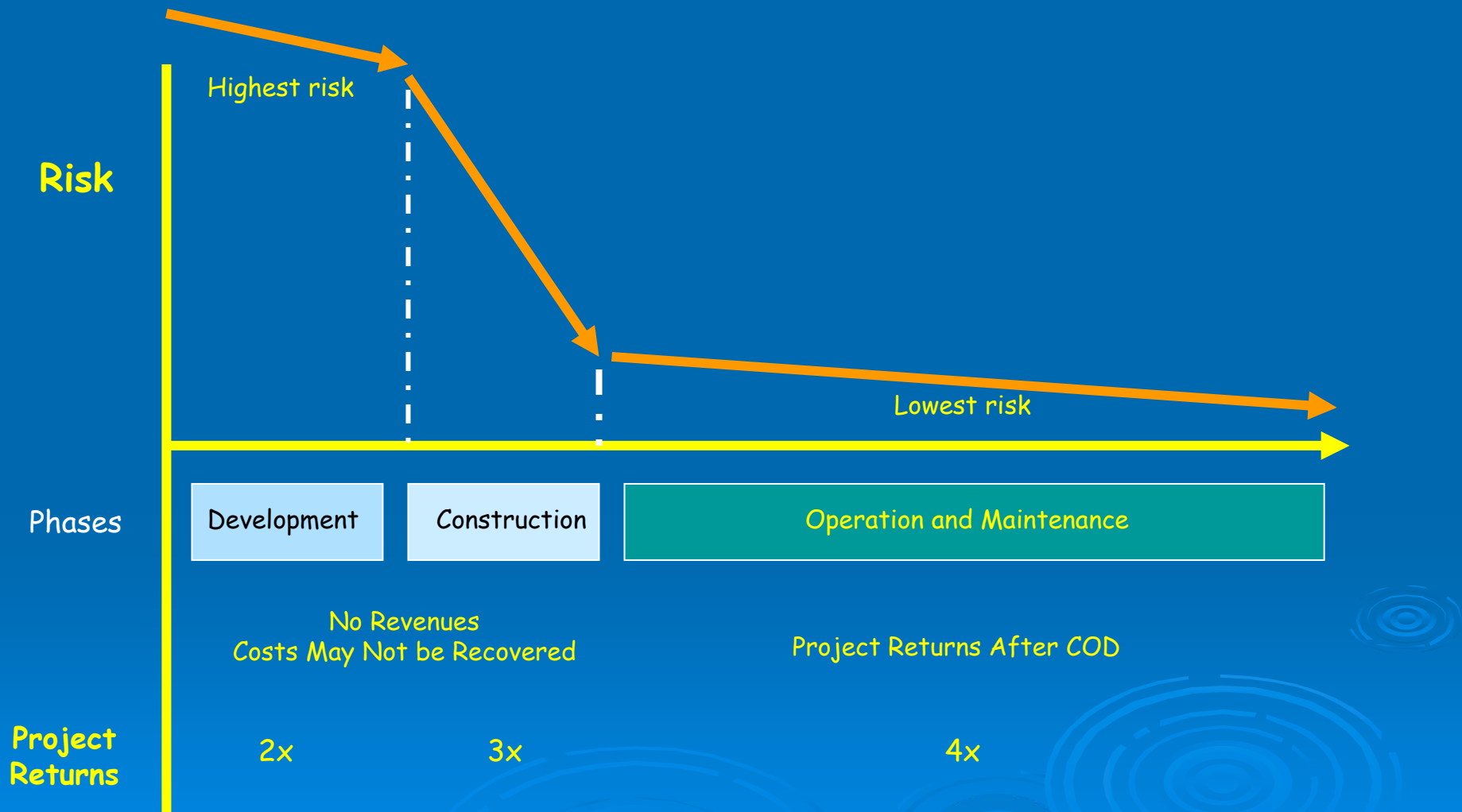
Eg: Energy Prices

Off-Taker Must
Accept Limited Risk

Risk Category	Company Risk	Off-Taker Risk
Design	×	
Construction	×	
Technology	×	
Operations - Controllable Factors	×	
Operations - Non Controllable Factors		×
Change of Law		×
Sewage Treatment + Water	×	

Risk Allocation . . .

Risk vs Return



Tariff Options . . .

Most Common Approaches to Tariffs

Two Part Tariff

Availability
Component



Designed to Recover:
- Capital Investment
- Interest Payments
- Return on Investment

**Fixed Amount
per Month**

Levelized Tariff

Single
Component



Designed to Recover:
- Availability Component
- Operating Component

**Applied per m³
Requires Minimum
Off-Take**

Tariff Options . . .

Regardless of approach:

1. Need to agree on formula to use for annual adjustments
2. Tariff should be fixed per m^3 for each year
3. Need agreement on 'risk allocation' for all major occurrences

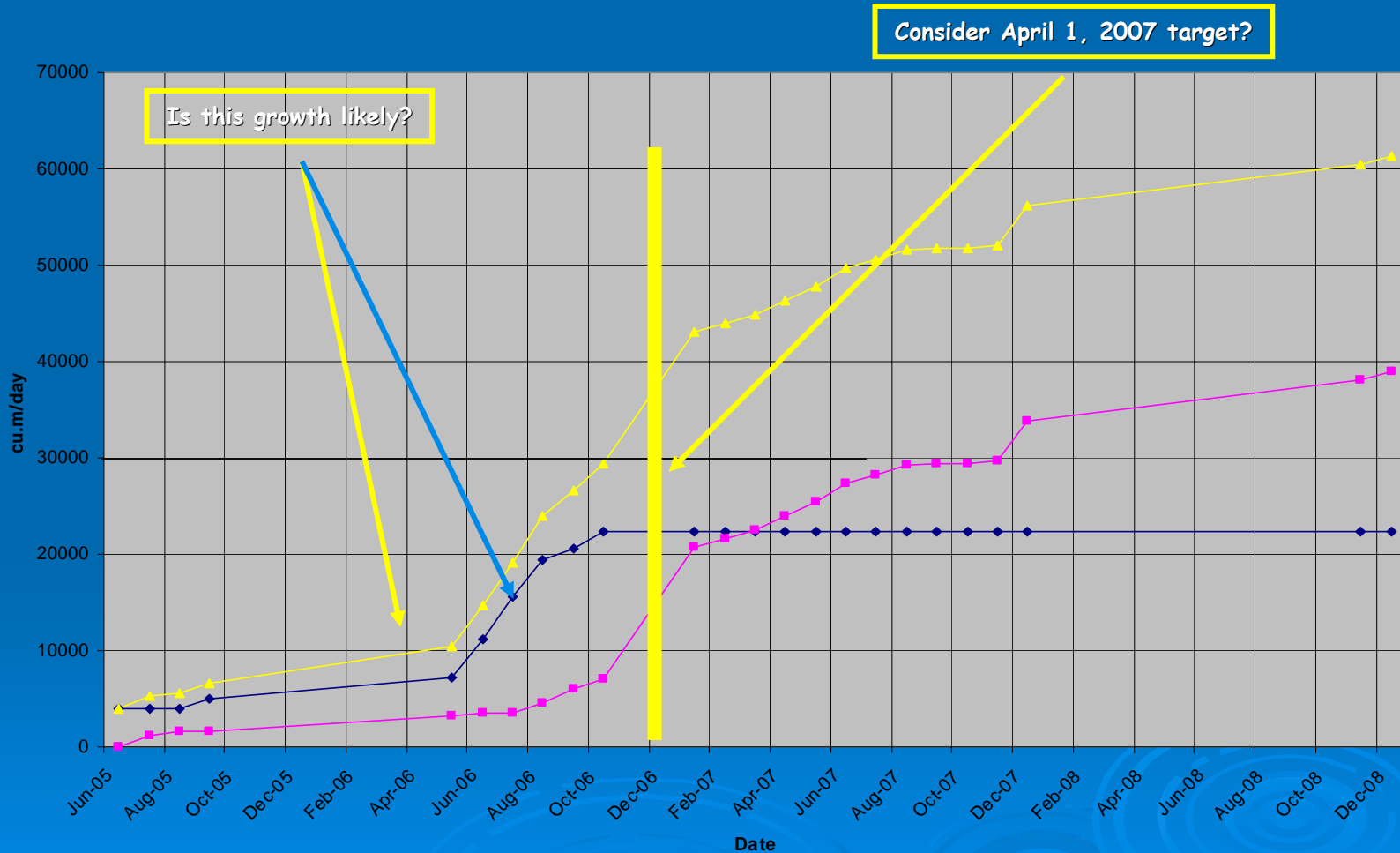
General Considerations . . .

Other General Principles . . .

- **Nothing is "free"**
 - If Project Company takes unexpected risk - tariff adjusted
 - If Off Taker takes unexpected risk - tariff adjusted
- **Key to have lowest possible tariff is to ensure:**
 - Demand projections are "reasonable" - most realistic
 - Minimize "overbuilding" utility infrastructure
 - Try to match construction program to fit demand
 - Allocate risk to party best able to mitigate it
 - Minimize "unexpected risk" for each party
- **Risk Allocation must be "fair":**
 - If in favour of Off Taker - higher tariff
 - If risk not reflected in tariff - bank unlikely to lend

Reasonable Demand . . .

Need To Agree On Demand Expectation



BOO Overview . . .

Typical Features

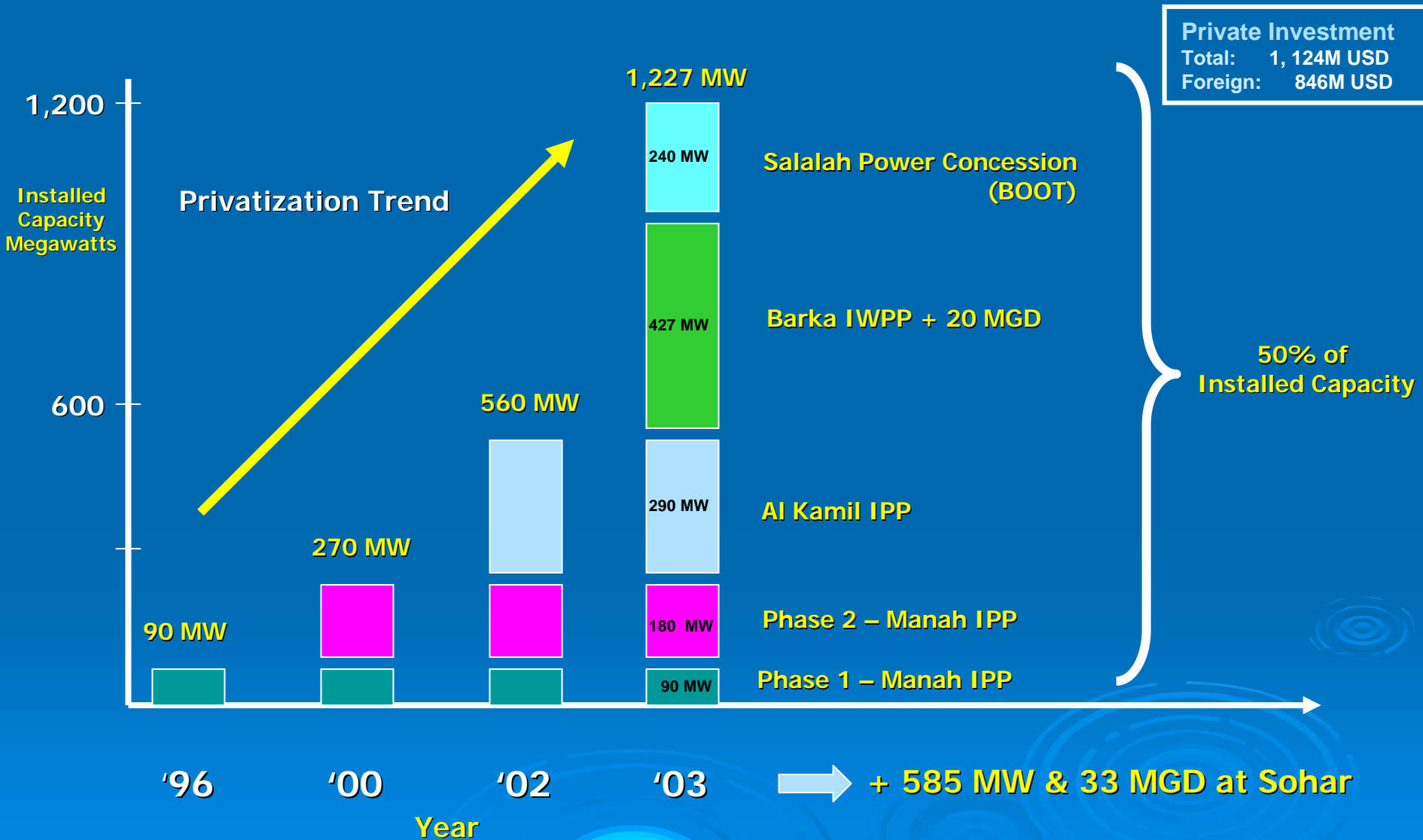
1.	Duration	Usually 15 years or longer - lowest tariff (for financing)
2.	Tariffs	Two part tariff if off taker is utility - single tariff to end user
3.	Risk Allocation	Allocated to party in best position to mitigate or bear risk
4.	Project Agreements	Prepared to international standards - "Bankable"
5.	Typical Minimum Off Takes	90% to 95% of Capacity - averaged monthly or annually
6.	Treatment Technology	Broad standards imposed - proven or reliable
7.	Performance Standards	Imposed on Project Company - with penalties & LDs
8.	Conflict Resolution	3 rd Party (ICC) - for significant issues

BOO vs BOOT



- If technology an issue - BOO preferred
- BOO likely to have lowest 1st yr tariff
- Can be problems agreeing on "T" rules
- BOO more in line with "privatization"

Privatization Trend in Oman ...



Key Success Factors . . .

Successful Transitions to Privatization

- **Communication** and **transparency** are critical
- Let the private sector do what they are good at
- Focus on "**performance measures**" & **results**
- Prescriptive at "**high level**" only - define parameters
- Fair risk allocation
- Have a "**competitive process**" for best tariffs and prices
- Spend the time and effort on the **general framework**
- Be **flexible** during implementation
- If outsourcing, be fair and open with all employees