



Society of Petroleum Engineers
SPE Brazil FPSO Symposium



29 - 30 September 2022
Rio de Janeiro / Brazil
Florida Hotel

PPSA View of the different Contract Models

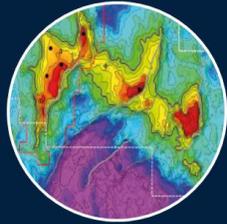
OSMOND COELHO JR.
LUIZ GUILHERME MESSIAS DOS SANTOS
FRANCISCO TORRES

Speaker: Francisco Torres

Topside Coordinator



PPSA Roles & Responsibilities



Production Sharing Agreement (PSA) management



Unitization on behalf of the Government



Commercialization of Oil & Gas Government share

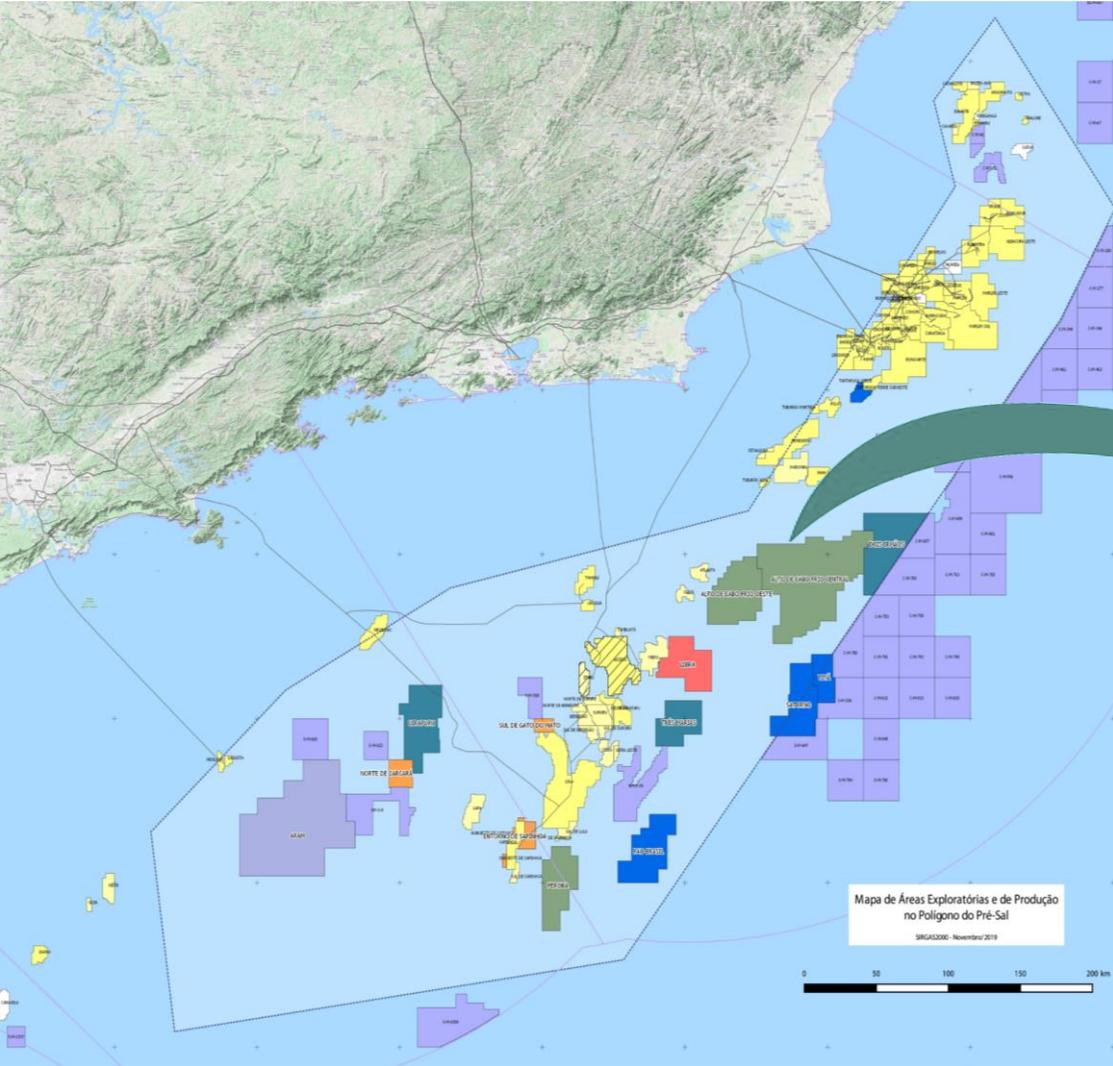
Maximizing economic results for Brazil on the activities related to Production Sharing Contracts



PRODUCTION
SHARING
CONTRACTS
MANAGEMENT

Society of Petroleum Engineers
SPE Brazil FPSO Symposium

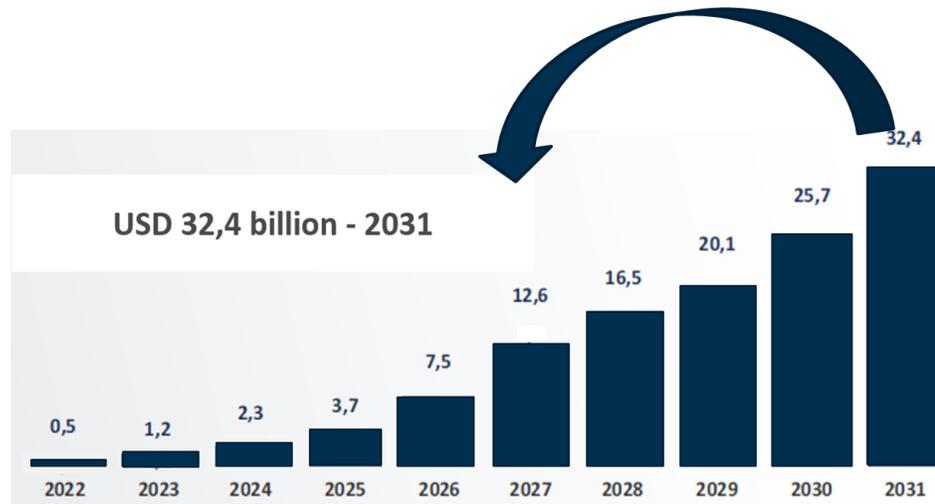
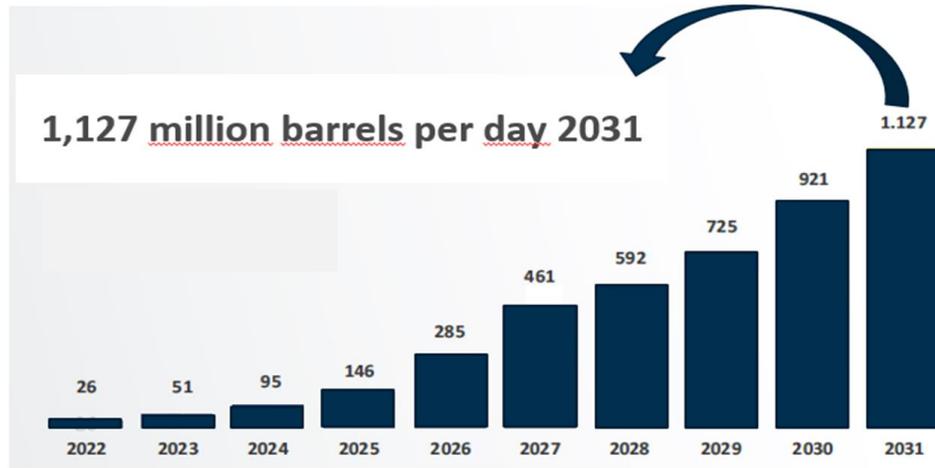
19 Production Sharing Contracts (PSC)



Pre Salt Polygon
A = 149 mil Km²



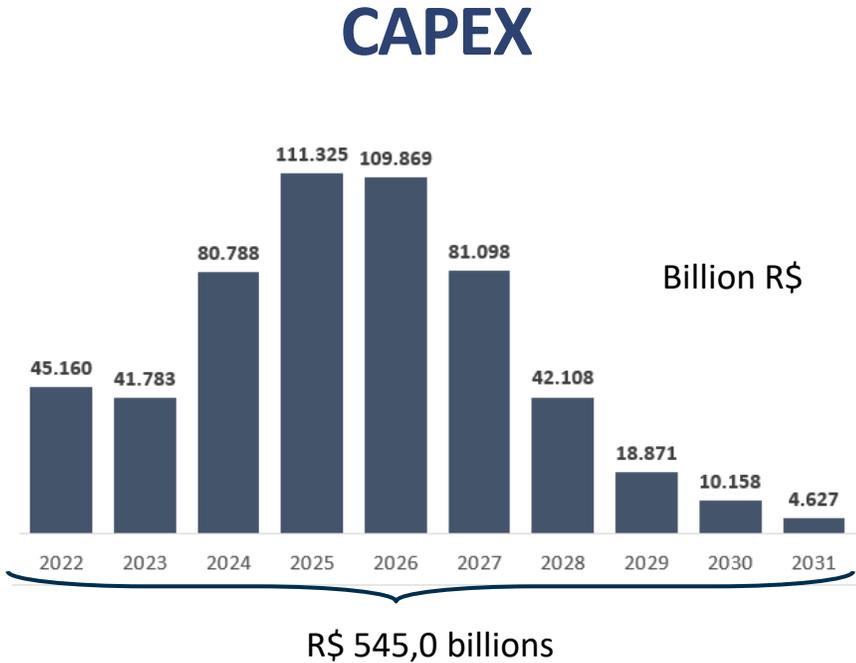
Expected Government Profit oil Commercialization



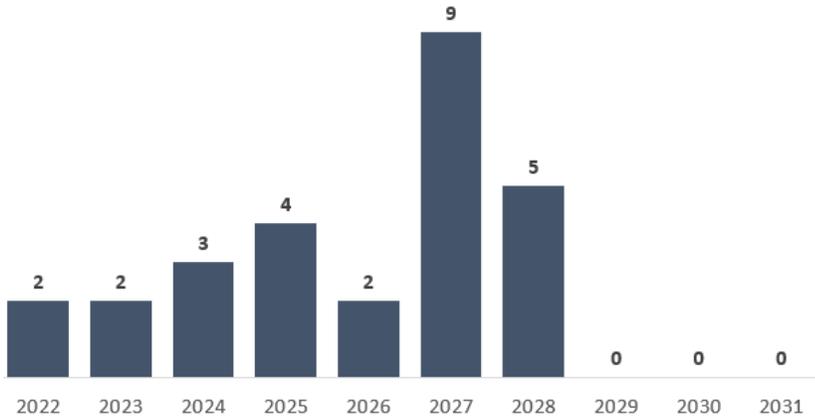
1,6 billions barrels
from 2022 to 2031

USD 122,7 billions
from 2022 to 2031

CAPEX Distribution

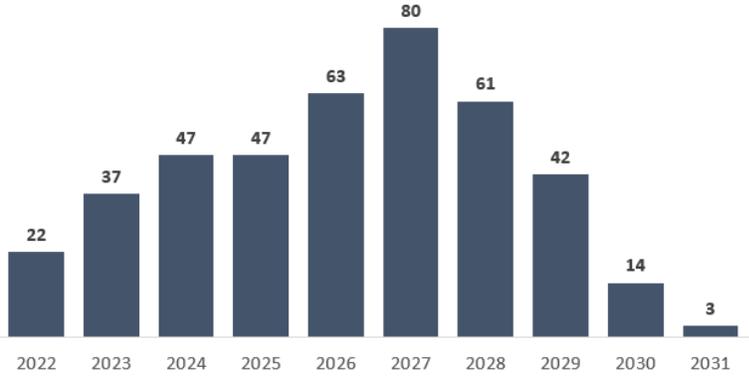


New FPSOs in Operation



27 FPSOs

Wells



416 Wells



**FPSO
CONTRACTING
MODELS**

FPSO Contracting models 1

CONTRACTING MODELS	RESPONSIBILITY				
	TECHNICAL SPEC	BUILD	OPERATION & MAINTENANCE	TRANSFER	OWNERSHIP
B BUILD	OPERATOR	3 RD PART	OPERATOR	✘	OPERATOR
BO BUILD & OPERATE	OPERATOR	3 RD PART	3 RD PART	✘	OPERATOR
BOT BUILD & OPERATE & TRANSFER	HYBRID	CONTRACTOR	CONTRACTOR	CONTRACTOR	OPERATOR
BOOT BUILD & OWN & OPERATE & TRANSFER	HYBRID	CONTRACTOR	CONTRACTOR	CONTRACTOR	CONTRACTOR OPERATOR
BOO BUILD & OWN & OPERATE	CONTRACTOR	CONTRACTOR	CONTRACTOR	✘	CONTRACTOR

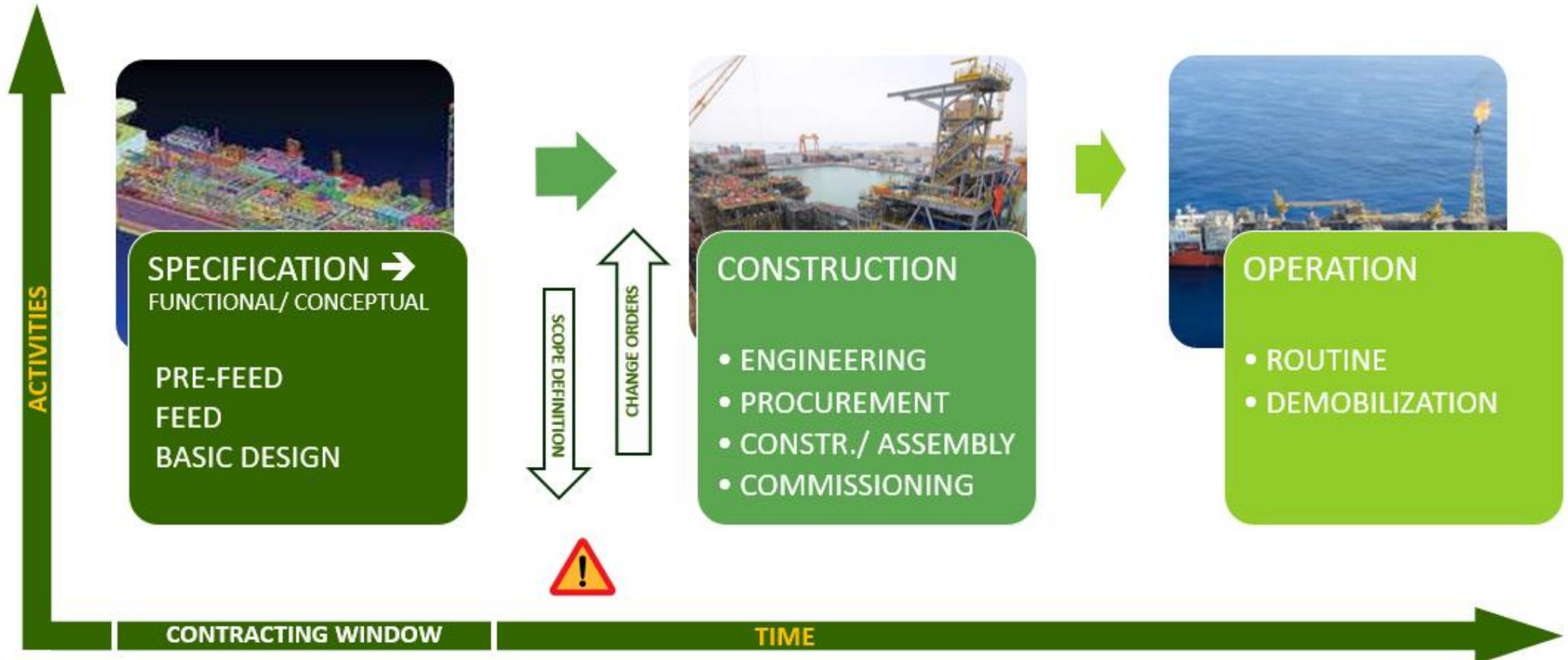
Source: MODEC



REMARKS:

- ✓ Operator's Cash flow vis-a-vis Cost recovery timing (production curve)
- ✓ Operator's financing cost X Contractor financing cost
- ✓ Performance risk on a transferred unit → Different Operation Philosophy

FPSO Contracting models 2



FPSO Contracting models 1

CONTRACTING MODELS	RESPONSIBILITY				
	TECHNICAL SPEC	BUILD	OPERATION & MAINTENANCE	TRANSFER	OWNERSHIP
B BUILD	OPERATOR	3 RD PART	OPERATOR	✗	OPERATOR
BO BUILD & OPERATE	OPERATOR	3 RD PART	3 RD PART	✗	OPERATOR
BOT BUILD & OPERATE & TRANSFER	HYBRID	CONTRACTOR	CONTRACTOR	CONTRACTOR	OPERATOR
BOOT BUILD & OWN & OPERATE & TRANSFER	HYBRID	CONTRACTOR	CONTRACTOR	CONTRACTOR	CONTRACTOR OPERATOR
BOO BUILD & OWN & OPERATE	CONTRACTOR	CONTRACTOR	CONTRACTOR	✗	CONTRACTOR

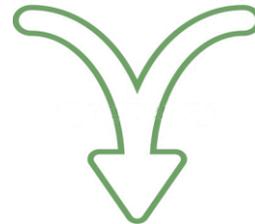
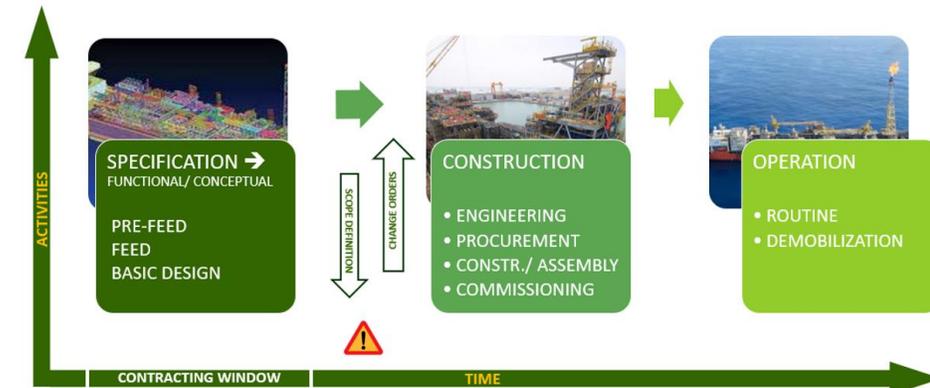
Source: MODEC



REMARKS:

- ✓ Operator's Cash flow vis-a-vis Cost recovery timing (production curve)
- ✓ Operator's financing cost X Contractor financing cost
- ✓ Performance risk on a transferred unit → Different Operation Philosophy

FPSO Contracting models 2



Contract model risks ???

FPSO Contracting models risks



✓ High financing costs for Contractors on BOO (Leased)

- Increasing amount of leased FPSOs
- Equity demand and long term risk profile

May result in low competitiveness

✓ Performance on BOT and BOOT

- Differences on Specs and Philosophy
- Limited lessons learned due to Transfer

Possibility of long term downtime or HSE issues

✓ Contract timing & Spec maturity for all Contract Models

- Poor Spec strategy → change orders
- Functional Specs + Owned Unit
→ Dangerous combination

Long cost recovery process due to scope or final cost modifications

Final Remarks

- 1. There is a material amount of Production Development Projects from the existing PSCs in Pre Salt polygon in the next decade;**
- 2. The 19 PSCs will demand around 27 new FPSOs which will seek for PPSA strategy & contract approvals and can be subject to cost recovery accordingly;**
- 3. From technical perspective, all different FPSO Contractual Models are capable of been accepted inside the PSCs by PPSA;**
- 4. Some of Contractual Models can induce more scope associated risks and may increase the non cost recover risks specially due to the change orders.**

Thank you !



Francisco Torres
francisco.torres@ppsa.gov.br



Society of Petroleum Engineers
SPE Brazil FPSO Symposium



29 - 30 September 2022
Rio de Janeiro / Brazil
Florida Hotel