



Gaps in the Supply Chain and Partnership Opportunities

UK & Brazil Partners in Energy 2022

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#1

Decommissioning

RESOLUTION No. 817, April 24, 2020 (D.O.U. 04/27/20)



Establishes the Technical Regulation for Decommissioning of Oil and Natural Gas Exploration and Production Installations in Brazil, in addition to disciplining the decommissioning in the assignment of contracts, the inclusion of onshore areas under contract in the production phase in a bidding process, the divestiture and reversion of assets, the fulfillment of obligations remaining in the exploration stage and the return of areas in the production stage. ”



MOTIVATIONS FOR UPDATING THE REGULATION

Resolution ANP No. 817/2020



To incorporate the National Energy Policy Council guidelines (avoid premature decommissioning and increase RF)

CNPE Resolution No. 17/2017 addresses the increase in recovery factor (RF) as an E&P policy, establishing the Permanent Offer of returned areas. Also, ANP must avoid premature decommissioning.



To improve technical, environmental, operational safety and port state requirements in a unified regulation

Modernization of the decommissioning regulation, including the joint effort of ANP, IBAMA and the Navy to update all technical requirements for offshore decommissioning, translated into a single PDI to be delivered by operators.



To establish a well-defined procedure and deadlines, as well as the unification of all related regulations

Update and unify the requirements for disposal and reversal of assets, and some requirements for the transfer of rights (Three resolutions in one)



#2

Decommissioning Panel and Opportunities

INFORMATION PRODUCTION

Decommissioning Dynamic Panel



Status of PDIs analysis



Report of PDIs and RDIs approved by ANP



Inventory of the Platforms contemplated in PDIs



Investment Forecast for the next 5 years



Res. ANP 817/20, Decom and Dismantling deadlines and rules



Frequently Asked Questions (FAQ)

DECOMMISSIONING AS BUSINESS OPPORTUNITY

Benchmarking



85 Bi USD

planned for decommissioning around the world in the next decade (Wood Mackenzie)



11%

in Brazil
3rd in the Ranking (Wood Mackenzie)

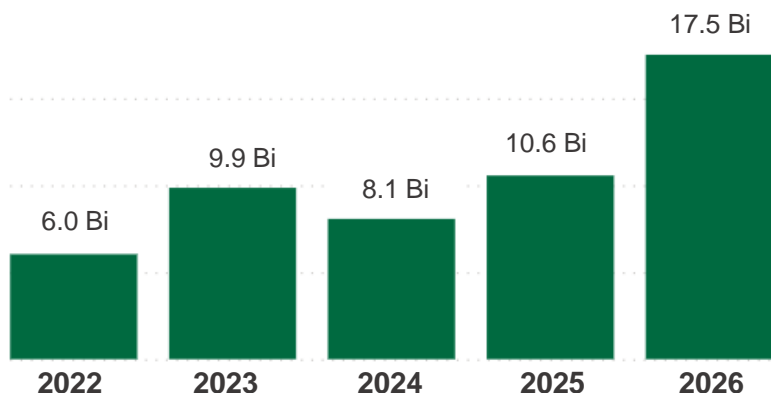


14.5 Bi USD

to 16 Bi USD forecast for offshore decommissioning in Brazil until 2029 (Wood Mackenzie)



Brazil



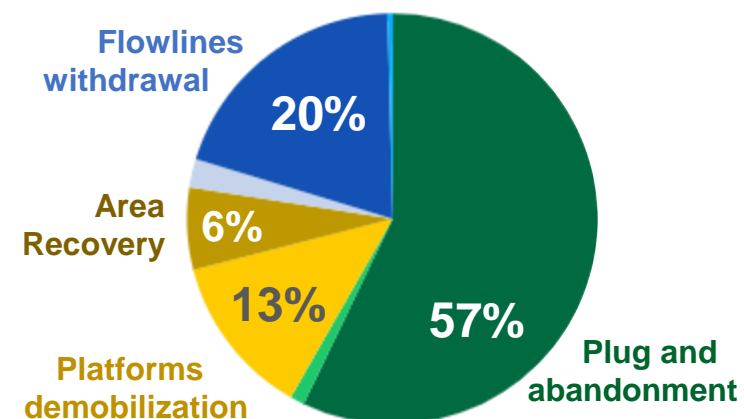
R\$ 52.02 Bi

2022-2026 Investments Forecast

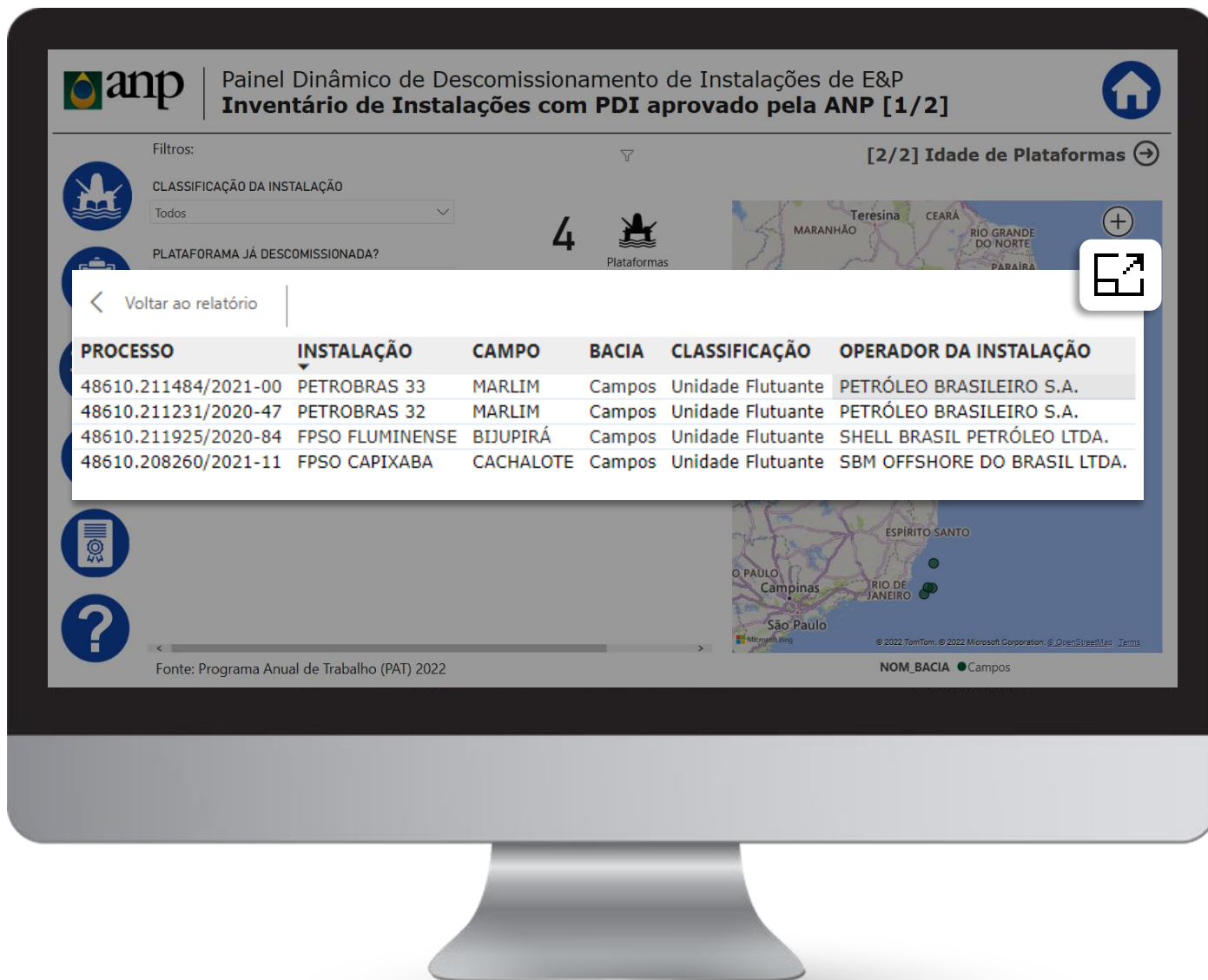
9722 wells

612 offshore
9110 onshore

To be decommissioned in the next 5 years



INVENTORY



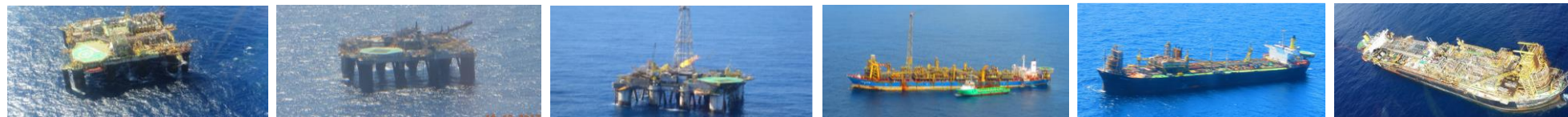
4
Platforms

To be decommissioned

Full list at:

www.gov.br/anp > Centrais de Conteúdo > Painéis Dinâmicos > Painel Dinâmico de Descomissionamento de Instalações de Exploração e Produção

PROJECTS

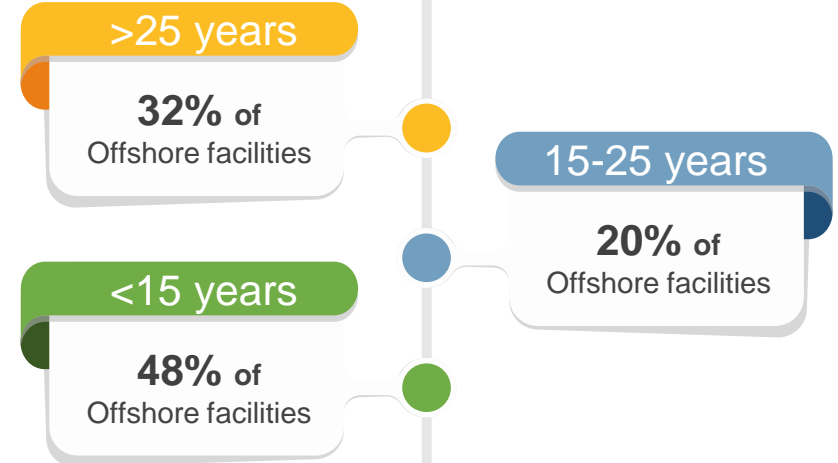
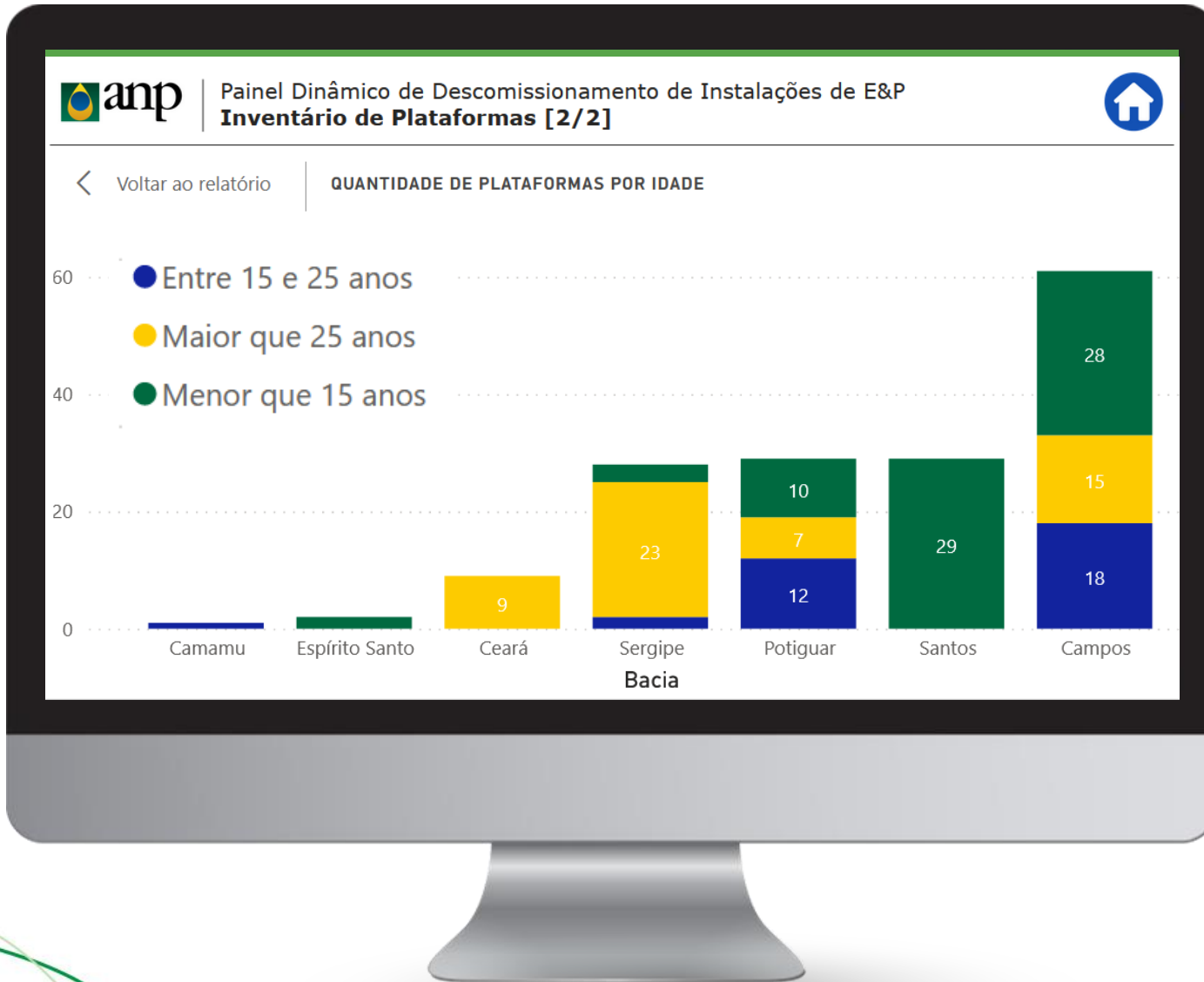


Platform	P-07 (Bicudo) LDA: 200 m	P-12 (Linguado) LDA: 100 m	P-15 (Piraúna) LDA: 240 m	FPSO Capixaba (Jubarte) LDA: 1400 m	P-32 (Viola) LDA: 160 m	P-33 (Marlim) LDA: 780 m
Platform Weight	10.240 t	11.574 t	13.155 t	52.020 t	44.532 t	48.921 t
Wells	47	41	28	9	-	13
Pipelines (Rigid)	12,6 km	49,4 km	9,5 km	-	2,9 km	-
Pipelines (Flexible)	187,4 km	356,2 km	181,1 km	146 Km	-	61,5 Km



Platform	PCA-01, PCA-02, PCA-03 (Caçõ) LDA: 19 m	Piranema Spirit (Piranema) LDA: 825 m	FPSO Polvo (Polvo) LDA: 105 m	FPSO Fluminense (BJSA) LDA: 705 m	PART-2 (Macau) LDA: 8 m
Platform Weight	1.800 t	26.523 t	-	52.301 t	-
Wells	13	23	-	22	1
Pipelines (Rigid)	27,0 km	-	-	21 km	5,5 km
Pipelines (Flexible)	-	123,9 km	1,8 km	43,4 km	-

OVERVIEW OF OFFSHORE FACILITIES



There are more facilities (~20 platforms) that have potential to generate opportunities for services related to decommissioning, life extension and redevelopment

GAPS

Many opportunities to create value

DECREASE TIME, RISKS AND COSTS

REGULATION



- 3 technical rules in 1
- Transparency
- Standardised PDIs and RDIs
- Transfer of Rights
- Permanent Offer
- Comparative Assessment
- Post-
Decommissioning Monitoring

LOGISTICS AND INFRASTRUCTURE



- Vessels (PSVs, Heavy Lifts, Drillships)
- Waste management
- NORM detection and management
- Shipyards and ports

TECHNOLOGY



- Life extension
- Structural Reliability and Health Monitoring
- Environmental Monitoring
- Cutting Tools
- RD&I

OPPORTUNITIES

**New
engineering
arrangements**

**Development of
New
Technologies
RD&I**

**Specialized
Services
(removal, P&A
& monitoring)**

**Supply Chain
Development**

**New
partnerships**

Job creation





#3

**2 Years of ANP
Resolution No. 817/2020**

ANP ACTIVITIES

Public interest

1 Dynamic Panel

2 Resolution ANP No. 817/2020 deadlines

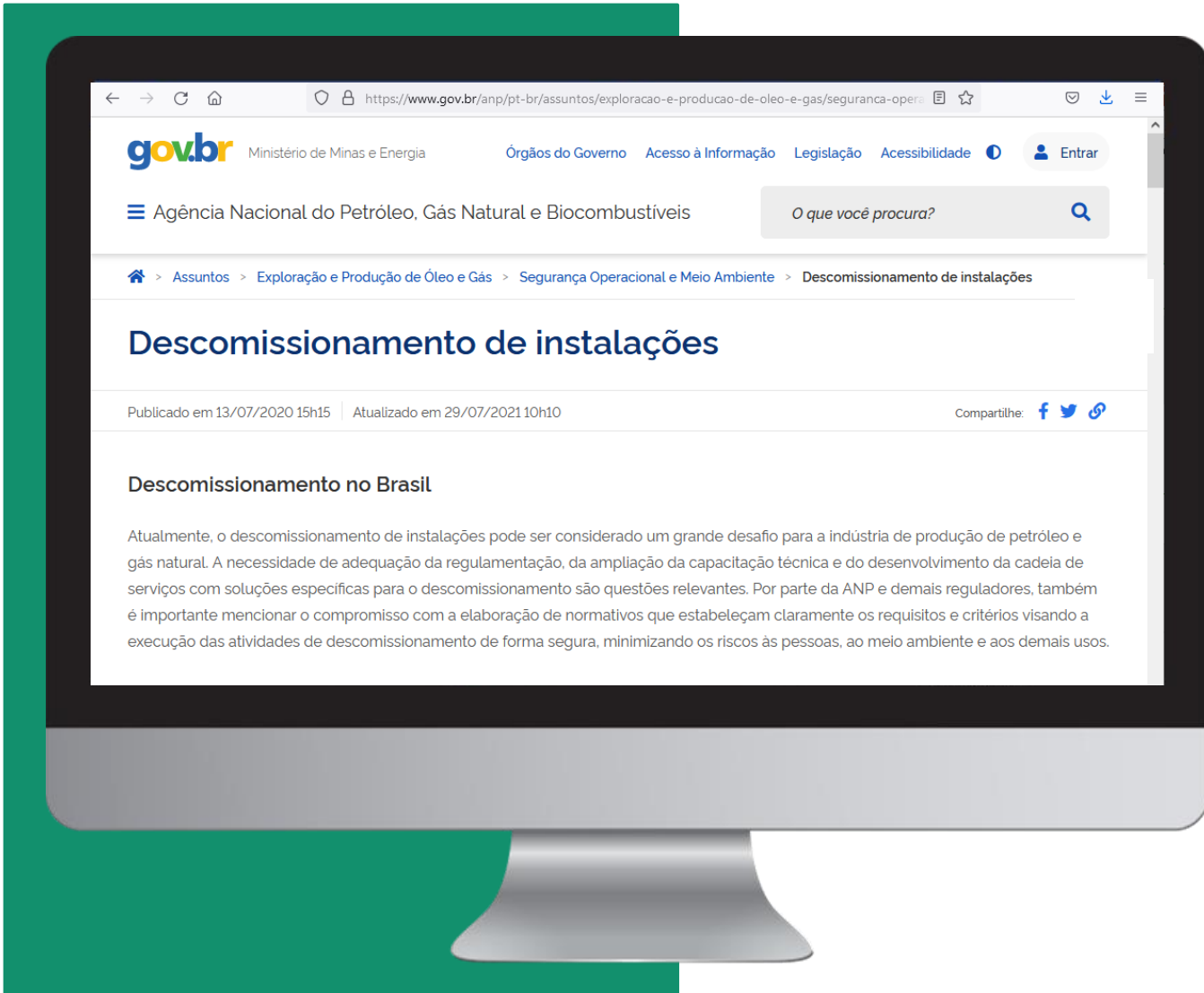
3 Decommissioning and Dismantling rules matrix

4 PDIs delivered to ANP

5 Technical publications

6 Projects and Events

7 Frequent Questions







anp

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