

Decommissioning of oil fields in Brazil offshore and onshore And Renewable Energy CCBJ February 18, 2022



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- Life cycle of an oil and gas field;
- Petrobras investment in the coming years;
- What is Decommissioning;
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- What are O&G companies doing for the energy transition?
- Final Remarks;

Figura 1: Ciclo de vida de um campo de petróleo e gás

Life cycle of an oil and gas field;

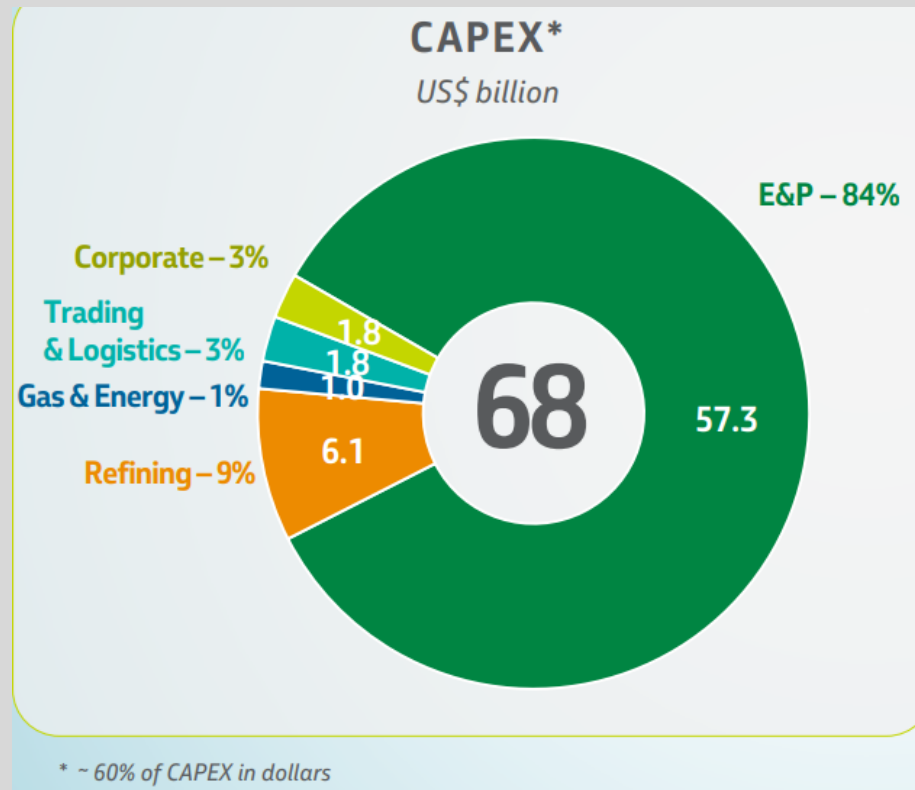


Optimal
interaction
Between
Decommissioning
and field
lifecycle

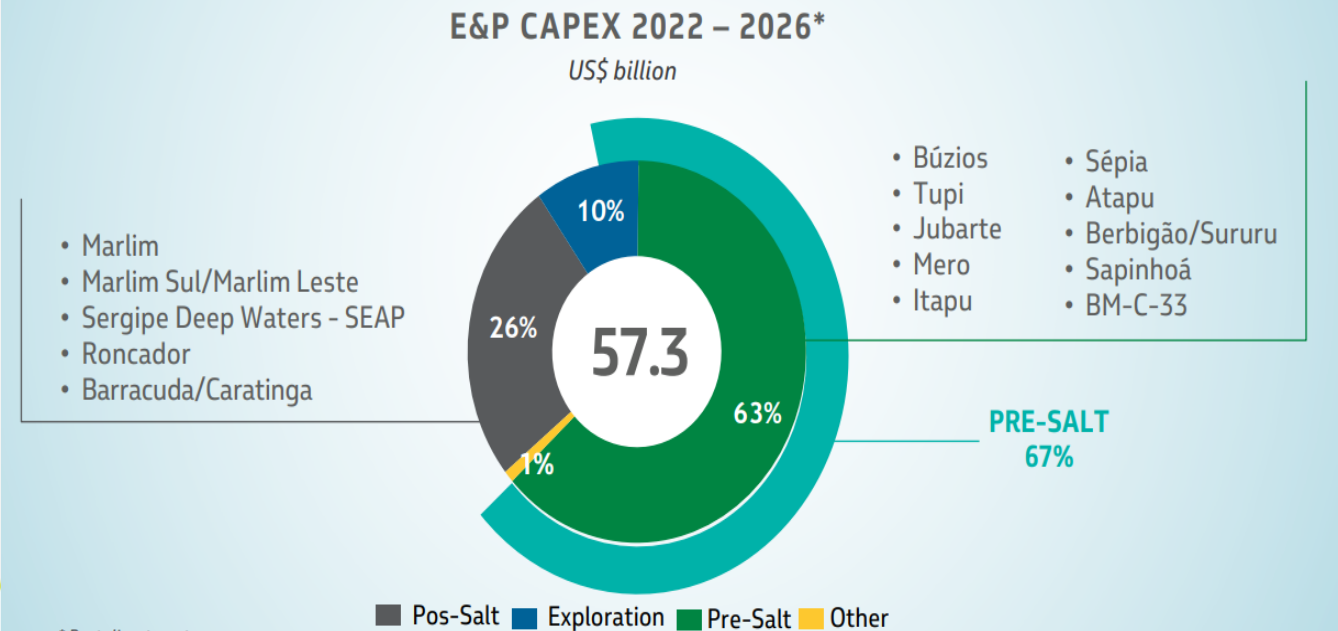
Fonte: <https://epbr.com.br/a-logistica-no-descomissionamento-parte-2/>.

PETROBRAS investments in the coming years

Source: PETROBRAS Strategic Plan 2022-2026

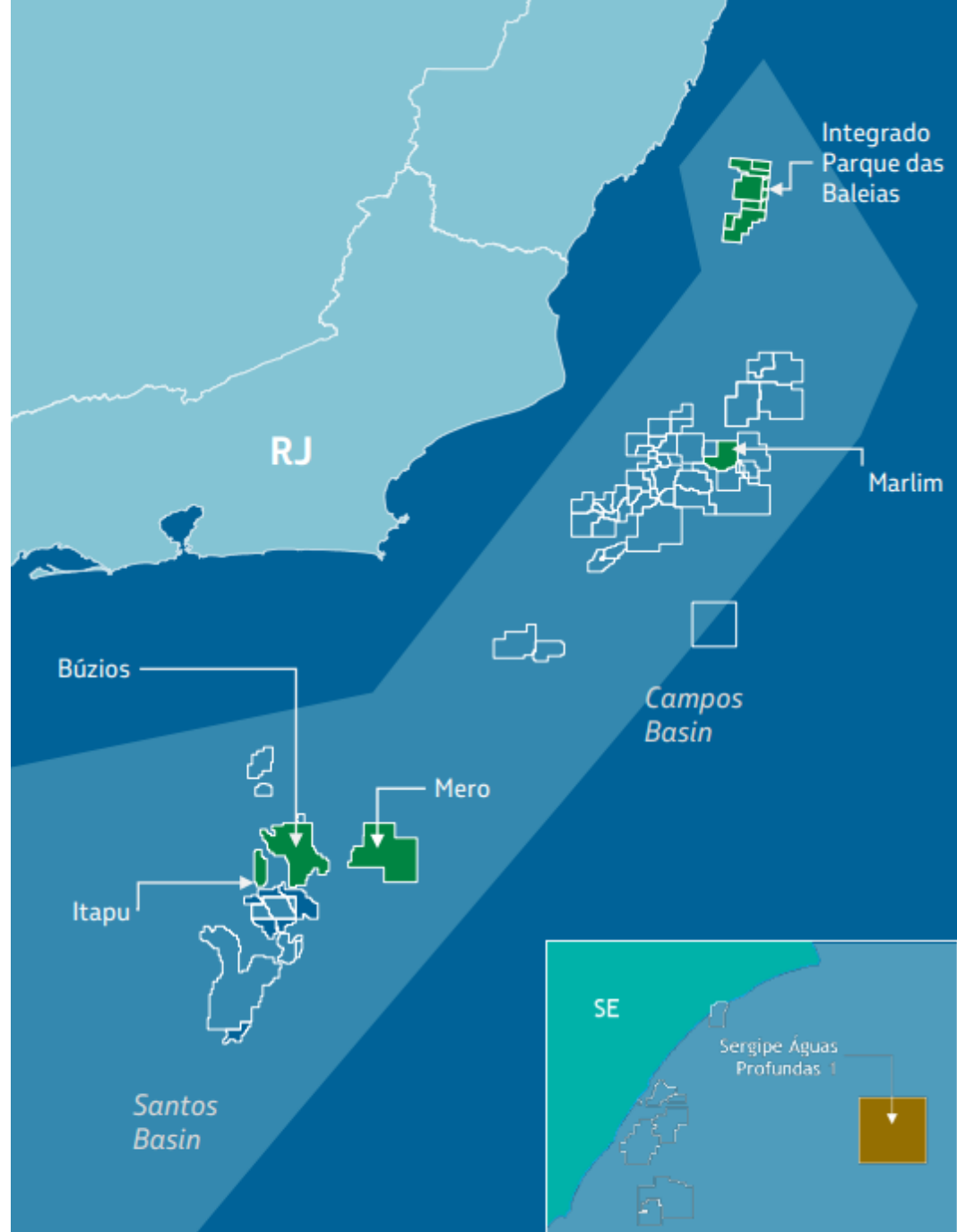


E&P INVESTMENTS FOCUSING ON PRE-SALT













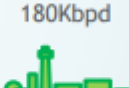
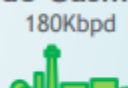



* Post divestments





PETROBRAS DAY 2021



LEADER IN FPSO PROJECTS

15 NEW FPSOs IN 6 FIELDS: 2022 - 2026

2022	2023	2024	2025	2026
 Mero 1 FPSO Guanabara* 180Kbpd	 Búzios 5 FPSO Alm. Barroso* 150Kbpd	 Búzios 6 ° FPSO Alm. Tamandaré* 225Kbpd	 Búzios 7° P-78 180Kbpd	 SEAP 1 P-81 120Kbpd
	 Itapu P-71 150Kbpd	 Mero 3 FPSO Mal. Duque de Caxias* 180Kbpd	 Mero 4 FPSO Alexandre de Gusmão* 180Kbpd	 Búzios 9° P-80 225Kbpd
	 Marlim 1 FPSO A. Garibaldi* 80Kbpd	 IPB FPSO Maria Quitéria* 100Kbpd	 Búzios 8° P-79 180Kbpd	 Búzios 10° P-82 225Kbpd
	 Marlim 2 FPSO Anna. Nery* 70Kbpd			
	 Mero 2 FPSO Sepetiba* 180Mbpd			

 Pre-salt in construction
 Pre-salt under procurement/to be contracted
 Post-salt in construction
 Post-salt under procurement

* Leased unit

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02/18/2022

WHAT IS DECOMMISSIONING?

After human intervention in the environment, to produce natural resources, or with other purposes or objectives, once its objectives have been fulfilled, make efforts so that the intervention carried out returns the environment to the initial condition or even in a better condition.

Investment estimated

2020 a 2024

	Wells	R\$ 16.297.810,00
	Equipment Withdrawal	R\$ 8.710.752,00
	Area Recovery	R\$ 497.140,00
	Others	R\$ 567.063,00

~R\$ 26 Billions



Considering: US\$1.00 = R\$5,20
R\$26 Billions = US\$ 5 Billions

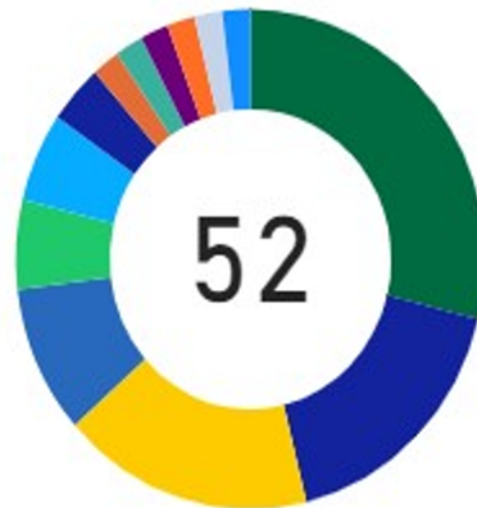
More about ANP-PDIs approved assets

Assets with green light from ANP

Basin

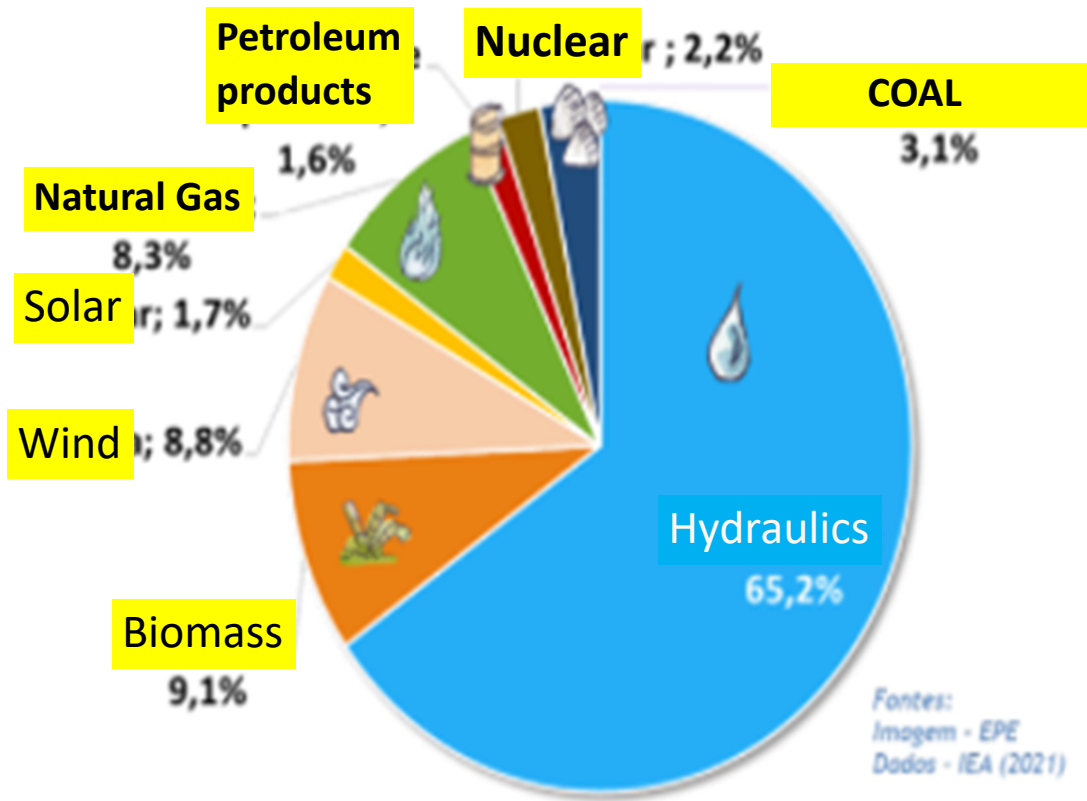


PDI by Basin



- Of the 52 assets with PDIs already approved, 20 of them are maritime. They integrate 6 basins: Camamu, Campos, Espírito Santos, Potiguar, Santos e Sergipe-Alagoas;
- Of the basins with PDIs released, Campos leads with 9 of the 20 assets. In second place comes Santos, with 5, followed by Potiguar (3), Camamu, Espírito Santos, and Sergipe-Alagoas have one asset released each.
- Finally, in the terrestrial environment, 32 PDIs are approved;
- Where are these assets about to be decommissioned? They are in 10 basins: Alagoas, Amazon, Espírito Santos, Mucuri, Parnaíba, Potiguar, Recôncavo, Sergipe, Sergipe-Alagoas and Tucano Sul;
- Espírito Santos leads the ranking of basins with the most approved terrestrial PDIs, with 14 of them;
- The second place is occupied by the Potiguar basin(6), followed by Alagoas(3), Sergipe-Alagoas (2) and Tucano Sul (2);
- Amazonas, Mucuri, Parnaíba, Recôncavo, Sergipe each have one approved PDI.

Energy Transition, ESG



Shell

More energy, less carbon. In recent days, Shell and [Gerdau](#) have formed a joint venture to develop and build a solar park in Minas Gerais next year. With the partnership, Shell takes another important step in its decarbonization purpose with the generation and commercialization of clean energy. Learn more:

<https://lnkd.in/dptM9s2Q>

#EnergiaSolar #EnergiaRenovável #TransiçãoEnergética #Gerdau

Image description of #PraCegoVer: during the day, we see a person in a red jumpsuit and helmet inspects a solar park.



What are O&G companies doing for the energy transition?

- **Reduction of CO2 emissions in production processes;**
- **Projects with greater energy efficiency;**
- **Improvement of products with reduced sulfur content;**
- **Use of Artificial Intelligence in the process to reduce energy consumption and lower greenhouse gas emissions;**
- **Investing in new technologies that will help make the energy transition smoother;**

Final Remarks

- **Decommissioning opened new business areas and investment opportunities;**
- **Brazil continues to invest in the Oil & Gas sector;**
- **Brazil has many opportunities;**
- **There is an infinity of areas for Investments;**
- **Some states in Brazil are creating poles for the production of alternative energy;**
- **We will still live a long time with different sources of energy!**

Thank You!

どうもありがとう



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Photo by Osvaldo Kawakami, june 2021, Mossoró/RN