

Webcast - Strategic Plan 2024-2028+ November 27, 2023

Fernanda Bianchini:

Good afternoon, and welcome to Petrobras' webcast with analysts and investors about the New Strategic Plan for 2024-2028 plus. It's a pleasure to be with you.

This event is going to be presented in Portuguese with simultaneous translation into English. The links to both languages are on our web page for Investor Relations. All participants will also be able to watch the event online as listeners.

After the presentation, we will have a Q&A session. You may send us your questions through petroinvest@petrobras.com.br.

With us tonight, we have Jean Paul Prates, Petrobras' President; Carlos Travassos, Executive Director for Engineering, Technology and Innovation; Claudio Schlosser, Executive Director for Logistics, Trading, and Markets; Joelson Falcão Mendes, Executive Director for Exploration and Production; Mario Spinelli, Executive Director for Governance and Compliance; Mauricio Tolmasquim, Executive Director for Energy Transition and Sustainability; Sergio Caetano Leite, Executive Director for Finances and Investor Relations; and other executives from Petrobras.

This presentation will be made available during the event for everybody.

To begin with, I would like to give the floor to Jean Paul Prates, the President of Petrobras, who will begin the presentation, and then he will give the floor to the other directors. Over to you, Jean.

Jean Paul Prates:

Thank you, Fernanda. Good morning, good afternoon, and good evening, everybody. We have people connected to us from everywhere, in Brazil, I am in Doha on the way to Riyadh, some of you are listening to us from China, Singapore. So, good morning to you if that's your case. And New York at 4:30 p.m.; London 9:30; 10:30, if you are in Norway. So thank you for your attention. It's a huge pleasure to be with you tonight, to talk to you about Petrobras' new strategic plan.

I would like to start out by highlighting some of the main achievements and deliveries of our new administration, which took office around 10 months ago. We approved new strategic drivers, among which, I want to highlight the focus on oil and gas, along with diversification towards low-carbon businesses.

We strengthened our governance. We also approved a new shareholder remuneration policy and a new commercial strategy, whereby we avoided transferring price volatility to our investors, at the same time that we ensured that our business would remain profitable.

Our decisions are reflected in the total return to shareholders, governments, and private shareholders. In the 9M23, it reached a valuation of 75%. We reached several production records in exploration and production and refinement, and we made an adjustment to the organization with the creation of the energy transition and sustainability department.

Some other achievements include the first purchase of carbon credits, and we also signed several strategic partnerships with reference companies to strengthen our position in low carbon projects.

We received an environmental license for the first two exploration wells for deep waters in the Potiguar Basin and we achieved a historical highly disruptive milestone for our industry by processing the Riograndense refinery. It was the first time that it processed 100% soy oil in an industrial refinement facility.

Talk about the new global energy context. As we can see from this map, out of 198 countries in the world, 151 took on the commitment to neutralize their emissions. Please note that these countries account for 88% of global emissions, 89% of the population of the world, and 92% of the global GDP. Our expectation is that the fossil demand in the transportation sector will significantly plummet by 2050.

Please note the reduction in the consumption of private vehicles, a decrease of almost 50% versus the demand for 2050 vis-à-vis 2021. At the same time, there is a substantial increase in the demand for petrochemicals and it's worth saying that our administrative board approved on June 1, the diversification in low-carbon businesses, including petrochemicals as one of the main focal points of Petrobras.

Petrobras has a good share in the petrochemical business, but it will probably further reinforce that. Corroborating this expectation of lower emissions in the slide, we see an expressive increase in the electrification of the fleet of global vehicles. And you can see that at the same time that the fleet is increasing in absolute numbers, the electrification is increasing even more quickly.

And now to talk about exploration and production, we will maintain our focus on oil and gas with a fade-in in terms of energy transition. The natural decline of reservoirs is a perennial challenge to the entire industry. You can see that the peak of the global oil production occurred in the 1930s in line with what we forecast for Petrobras that we will further explain later.

The crucial aspect here is that even in the face of lower global demand, there is no magic bullet. Investments in exploration and production are required if we are to meet the oil demands even if they are decreasing.

And some say that it's not the case. The world still needs investments in exploration and production so that the demand for energy is met. And therefore, we are looking to replace our reservoirs and explore new frontiers that will meet the global requirements for energy during the transition with the lowest carbon footprint possible.

The next slide, about the grid, shows the primary energy offer in 2020, 2050, which summarizes this context that we are discussing. There are two conclusions to highlight here.

First, oil and gas have a fundamental role in the energy mix, and will continue to be highly relevant in the global scenario as you can see on the right-hand side of the slide, in the 2050 perspective. But as you can see, transition is also inevitable. The percentage of renewables will increase from 16% in the mix in 2020 to 39% of the global mix by 2050. In that regard, Petrobras will continue to generate value to society with drilling investments, not only in oil and gas, but also in the energy transition. And we will do that, leveraging our technical expertise and our knowledge in project management.

So how are we going to face this challenge? By making use of low carbon value levers with onshore and offshore wind, biorefining, carbon capture, hydrogen and solar, leveraging our stack capabilities and project management knowledge as differentiators to explore regional competitive advantages in Brazil.

We will also do that in partnership to bring down the risk levels and to share knowledge. At the same time that we use our expertise in exploration and production for wind and offshore since we are a deep offshore or offshore company. Also in refining since we have an advanced firm in gas for hydrogen since we have the deepest knowledge in that regard.

All that based or deeply grounded on our ESG positioning, where we intend to reduce our carbon footprint, protect the environment, care for people, and act with integrity. With clear code objectives for diversity and inclusion among our workforce, one of our goals is to be among the top 3 ranking companies in this score by 2030, and we want to reach more than 50% of active employees by 2028 and promote diversity, increasing to 25%, the percentage of black people and women in leadership positions by 2030, and the integrated action plan to manage psychosocial factors at work in 100% of critical situations by 2028.

And lastly, this is our value proposition. Firstly, we will have a growing production in oil and gas and will generate value for our business, where I would like to highlight our projects with high returns and low breakeven numbers in addition to higher downstream integration.

Secondly, we will create value with a fair transition, we will diversify into profitable low-carbon businesses prioritizing, as I said before, the partnerships. We from Petrobras will do what we have to do so that the industry is fully committed to solving the climate crisis.

And thirdly, we will focus on capital discipline. Controlling debt is one of our priorities. Our investments respect what we understand as the ideal leverage and we will do everything based on a solid project governance.

By the way, I should remind you that our governance was strengthened in this administration, as we just said. We believe that this is a continuous process that is not restricted to the governance department, led by our Director Spinelli. But rather, it involves everybody from the Company.

At the end of the presentations, I will come back. But now I would like to give you Director Sergio. So please, Sergio, you have the floor. Thanks, everybody.

Sergio Caetano Leite:

Good evening, everyone, employees. Good evening, investors and analysts. Good morning, good afternoon. Let me start by talking about our capital allocation priorities.

Our number 1 priority is to strengthen our balance sheet. We want to keep it solid and robust so that we can navigate this transition phase. We will keep our debt under control, up to US\$65 billion in the 5-year period. We will maintain our cash position at, at least, US\$8 billion.

We have access to revolving credit lines. Our financial debt will be lower than leasing, which is most of our debt. CAPEX and other financial obligations will be funded by our operating cash flow.

Our investments generate a lot of value, as you can see in the next slide. This administration is committed to the fact that the projects have to have a positive NPV under the most conservative scenarios. We have full accountability of directors and our Board members.

Still talking about priorities, let me just say that dividends and buybacks will have the same policy for shareholder payouts, 45% of our free cash flow and buybacks, with the possibility of paying additional dividends if cash flow allows so, not hurting our debt level and according to the Company governance policies.

For the first time we are announcing our internal return rates by segment. Exploration and Production. The most important revenue comes from this segment at 23% of internal rate of return, 14% refining, transportation, and marketing and above 8% rates for gas and low-carbon energies.

This is the CAPEX allocation for the year, US\$102 billion, major investments vis-à-vis the current scenario. These US\$102 billion are broken out into two portfolios, one, our implementation and the other one is under evaluation.

All projects that make up those US\$102 billion are priority projects and they can generate revenue at the levels I showed you in the previous slides. Those that are under evaluation have already gone through the Company's governance and they are at a later stage. Under evaluation, we will follow the rhythm or the pace of the Company, and they will be confirmed throughout that analysis cycle.

This is our CAPEX under implementation, the US\$91 billion. This is broken down by segment and a long time. Let me point out that we have US\$18.5 billion for the next year alone, US\$21 billion in 2025. And then a slight decrease reaching US\$15.2 billion in 2028. As to this CAPEX allocation, let me say that about 90% of our CAPEX for 2024, 2025 is under contract or already with the contract finalized.

So it is a solid portfolio of US\$11 billion under evaluation. We have added an additional layer, additional governance procedures to make sure that these projects will come down to the implementation portfolio. So an additional care as to the financial sustainability of the Company.

This is a breakdown of our CAPEX increases. As you can see, the implementation period of 2023-2027 has just been finalized with the approval of the 2024-2028, investments amounted to US\$78 billion for a 5-year period. When you look at those US\$8 billion, you can see the impact of inflation in our industry and then an additional US\$15 billion, and other revenue, US\$1 billion that would come up to US\$102 billion.

On to sources and uses. On the left, you can see cash generation remains robust between US\$180 billion and US\$207 billion for the period. Other earn-outs from zero to US\$ 3 billion.

All the investments we have made can be funded by its own cash generation. You have investments worth US\$90 billion to US\$95 billion, which is cash flow direct investment. There are no platform leases included there. And then dividends, about US\$40 billion to US\$45 billion, with the possibility, again, of 5 to 10 additional dividends, and then on to leasing of our platforms between US\$35 billion and US\$40 billion.

I will turn over to our Governance Director, Mr. Spinelli.

Mario Spinelli:

Good evening, everyone. I am Mario Spinelli, I am the Governance and Compliance Director of the Company. Let me talk about strengthening corporate governance principles.

We have a very solid governance system that will focus on technical decisions and will ensure the approval of projects that can give economic returns. We define our principles, we define our mission, strategic goals, and our Executive Board, in charge of managing the business results, will make the decisions, and they are all based on technical assessments.

We do have specialized committees in place according to our bylaws, and they provide support for both Executive Board decisions, as well as the Board of Directors' decisions. This entire process is based on technical assessments and legal expert reports, so we have a very solid governance policy to ensure, as I said, technical decisions and prevent undesirable political meddling.

So we have that independence for both governance and compliance, a director that has a mandate with independence. We have an independent internal audit committee, and we play the role of a second line of defense, and our general Ombudsman department, which is also independent and they also have a mandate.

The Ombudsman department is managing our red hot line. So we have an entire track that is monitored by internal units and controls that will ensure that there's that segregation of functions, and any complaints will be properly dealt with.

We have the supervision of several independent agencies, such as SEC to protect our investors, we have external auditing by the executive branch of the government, we have the accounts tribunal, we have the state-owned company departments as well as CADE.

Let me point out the principles of our governance. Our structure is very robust. The Governance and Compliance Director has veto power for any decisions that will not stick to the Company's policies. So he has that power. That director is independent. I was chosen through an independent process by a specialized company for a 2-year term. I work for the controllership of the federal government. I have over 24 years of experience. I was one of the authors of the anticorruption laws for transparency and information access. I also co-wrote the Conflict of Interest Regulations. So I have been in the public and private sectors dealing with governance and control issues.

As soon as I took office in late April, we conducted an analysis of an entire governance system of the Company. I was familiar with it because I used to be the General Ombudsman between 2016 and 2021. And I believe that we should focus on some specific areas to make it stricter. We have a new executive department with specific responsibilities to owe employees and companies accountable. This is yet a strengthening of our policy.

We have sort of a corrections department with the same status of an executive department. The area in charge of investigations has also become an executive department. We have a new general directorship to monitor integrity and specific departments for harassment cases. So we do have a department that has been strengthened with all the tools to be able to monitor all the decision-making process at the Company.

Let me point out that Petrobras is subject to very comprehensive legislation in effect in the country. Now I will say that our executives, our professionals cannot work to jeopardize the Company. We have to practice market prices according to the oil law. And when guided to pursue public interest, the government will reimburse the Company in case that are differences to market conditions. It's part of our government-owned legislation in the country.

I will turn it over to Joelson Mendes, our Exploration Director.

Joelson Falcão Mendes:

Good morning, and good afternoon, good evening, wherever you are in the world. It's a pleasure to be here. I am the Exploration and Production Director.

At this point in time, we are celebrating 70 years of existence. We have been celebrating extensively, and we remain very positive. I had a different slide to start. I would like to talk about her. She's our platform manager. She works on a platform, running our operations in a large FPSO. She's wearing that overalls, representing our employees with PPE, looking ahead into the future. That's exactly what we have been doing to start our strategic plan.

We have reviewed our strategies for both exploration and production. We have been focusing on maximizing our portfolio, keeping our focus on profitable assets overall, not only for pre-salt, not in very deep waters, but our entire portfolio. We have been working hard to decarbonize our operations, this is yet another activity that has to do with our exploration and production, which is the reserves replacement, trying to increase gas supply and looking for new frontiers, and we will be talking about that shortly.

Next slide, please. We try to have a double resilience, both economic and environmental. As far as environmental resilience, we try to maintain our greenhouse gas intensity, the carbon intensity or presence in our operations up to 15 kg of CO2 by the equivalent of oil barrel by 2030, with zero routine flaring by 2030. And by 2025, we have a total reinjection of 80 million tons of CO2 in our Carbon Capture, Utilization and Storage project and reducing methane emissions. We know how important it is to reduce methane emissions in our operations.

On to economic resilience examples now. We have a plan to have a US\$25 per barrel as a breakeven. I have a hard time reading this slide myself. Is it 23%? I will be reading it on my computer screen. It's not clear. I couldn't read up the slide. So 10 years to pay our investments, US\$6 per barrel for lifting costs and free cash flow of US\$17 billion in exploration and production activities. This is easier. I can read it more easily now.

The entire portfolio will vary. There's a different breakeven, but 75% of our projects are under US\$35 per barrel. 100% of projects under US\$45. On average, US\$25 per barrel. So that's the breakeven for our projects.

Here is our production curve. Just like the CEO has said, it's a growing production and along the lines of what we have been producing. Four major production systems have

joined the portfolio, they have contributed to that growth. Still have a yet another system to be joined later this year and several in the years to come. One more next year.

With a natural production decline of our reserves, and these new systems implemented, we have a 2.8% increase, up to 3.2% by 2028. Most of that production is based on presalt areas, but with the investments in the Campos Basin with the refurbishing projects, we have been able to keep on constant pre-salt participation contributing to that growth, almost 4 million barrels a day, reaching 4.6 million in 2028.

On to the next slide. When we look at the Campos Basin, it used to be most of our production, but it remains significant, nonetheless. But when we look at it, in 2028, 40% will come from the pre-salt areas. That's a very interesting data.

New wells will be connected. We have yet four new production units: Parque das Baleias, Albacora, Barracuda and Caratinga. Caratinga is a revitalization project. We are taking mature wells and bringing new life to it. BM-C-33 run by Equinor, who will be producing a lot of gas to our operations.

We will make US\$22 billion worth of investments in the next five years, and then we will reduce extraction costs significantly, reducing our emissions, a 35% decrease for the Campos Basin alone.

Next slide, on to the Santos basin now. It's behind the Company growth. We have a very integrated production that is very substantial, 3.5 million barrels a day, 99% coming from the pre-salt. We will have an additional nine production units. Gas supply will be increased by 18 million of m³ a day, US\$41 billion of investments in those projects, and that operating cash flow is US\$27 billion. The average intensity is about 10 kg of CO2, helping us reach that goal I showed you in the previous slide of 15 kg by 2030.

On your left, we can see our organic reserve replacement ratio. This is what we have been doing with our production, not acquiring new operational assets from other operators. When we compare that to our peers, we can see that we have been very successful in replacing our reserves.

Most of our production growth is based on this replacement of reserves. To do so, we will keep on heavily investing in seismic acquisition, US\$4 billion of investments using best digital technologies so that we can have more reliability in our production estimates. And by doing so, we will be able to recover oil and gas, making our assets more and more profitable.

Next slide. This is a specific slide about exploration. We are increasing our investments in exploration. If we compare it to the previous plan, maintaining investments of more than US\$3 billion for the equatorial margin in the Southeast basins. Also making investments abroad in South America, more specifically, the equatorial margin is what we call the new frontier. We have no prediction there yet but knowing and understanding what's happening around us in the neighboring countries, we expect to be able to better operate there and also based on what the geoscientists produce in terms of data.

And we intend to drill 16 wells in the Equatorial Margins in the next few years. And we will also be allocating a rig to the Potiguar Basin, where we intend to finally start the campaign that we have been talking about for a while now with significant investments in the Southeast basins as well.

This is my last slide before I give the floor to Travassos. This is the profile of our production curve. Once again, shown an important decrease, which is a characteristic of

our reservoirs and the way we implement our projects, trying to maximize the net present value of our projects. In places where production is already in place, you see an important drop. But if you consider projects starting from 2022 onwards, we see an important increase in production.

And in the area where you see replacement challenges in the graph, that's where we have a big challenge in replacing our reservoirs through our studies and seismic assessments and new projects and also with exploration.

So the exploration that we have planned for the Southeast basins and the Equatorial Margins that is comprised of five different basins, we expect to solve these challenges with that.

Thank you for your attention. I am available to take questions. And with that, I would like to give the floor to Travassos.

Carlos Travassos:

Thank you, Joelson. I would like to talk about our procurement processes that take place in a challenging context. We still see some effects related to the end of the lockdown and the war in Ukraine, which brought about scarcity in the raw materials, some cases of acquisitions as well.

You see that the market is still trying to find its current position, and also an increase in prices, which reflects our strategic position. We have been taking actions related to that. We saw that historically speaking, the commodity prices usually are on par with Brent, but since 2012, there was a detachment between the prices. Oil was, as usual, unpredictable, but the prices of assets were going up. We believe that some of these effects will remain. These effects are here to stay.

We have some response plans, one of which I am going to cover in the next few slides, which is a partnership with the supply market, but we also have plans around reducing the tax costs interconnections and tech innovations to give support to all of these reductions.

Next slide, please. So here, we see some of our strategies to engage our suppliers. We have ESG, we understand that we need to "contaminate" our suppliers with good practices in terms of respecting and caring for people, bringing down emissions. And we believe that, by establishing these requirements, we make providers ready to face the challenges.

Another initiative is a volume synergy. We have a matrix-based vision for the market. We look at the market and we see its capacity to serve. And with that, we accommodate our procurement strategy, and we adjust it according to what the market can do.

We have been developing an active listening to our suppliers through collaboration rooms. And also, during the auctions, we also have value chain mapping related to renewable energies. We have been fostering partnerships to increase the quality of our suppliers' products through many initiatives, including recognition events.

This is a slide that we traditionally present in our strategic plan. If you look at 2023, some of you that have been with us for longer, you probably noticed that the P-50 unit is not there, it's P-51 that reached its production peak recently. We have the two Revit units, Anna Nery and Anita Garibaldi; and Búzios 5, Almirante Barroso, which led production

in record-breaking time in 5.5 months when it reached its production peak. And we expect to bring into operation by December this year Unit number 2, FPSO Sepetiba.

For next year, we have Mero 3, and I think it's important to highlight that, out of these 14 units, ten are already procured and in construction phase, and four are being procured. We are already on the market for that, with very positive results if you consider a scenario that's brought with restrictions.

Another aspect that we should highlight is that the second company that's implementing the greatest number of E&P projects is us, and this brings about complexity to these projects and requires careful planning because we ended up heating up the market and placing more demands on the market.

For 2028, we have the two SEAP units; the Revit for BRC and CRT; and BM-C-33, as Joelson said, which is a rig that's operated by Equinor.

This slide highlights the subsea and well department. PLSV is operating. We are also facing the challenge of installing and removing 9,000 km of pipelines, 350 wells still to be built and more than 500 wells that will be abandoned. That is a very relevant demand, in addition to the logistics that requires in terms of aircraft and support vessels and whatnot.

On the bottom right-hand side, the image gives you an idea of what is involved below sea level.

This slide describes what we have been doing to improve our efficiency. This is a way for us to respond to the increased cost of our assets with very expressive results. I brought you some examples with the pre-salt.

For instance, the average cost of pre-salt well construction, we saw a reduction of 34% if compared to 2019, which is quite significant. Part of that reduction is associated to technological innovations, but also to improvements to our logistics. And the same thing applies to the average cost of pre-salt well connections of internal programs that are dedicated to bringing down the costs when it comes to wells.

For instance, we have an internal program called PEP-70 dedicated to pre-salt, another program for the post-salt. And in the case of connections, we have a program that I lead personally, it's inter-league, where we have been able to reduce the idle time of vessels, and we have been reducing the average time required to connect wells. And that leads to an increased efficiency of our units. A significant amount of our production curve is related to how these units are going into production and how efficient they have been.

This slide describes some of our technologies. We have our research center with lots of researchers, Master's and PhD degrees, an extremely qualified team that has been doing research around value delivery. We have technological initiatives, as we call them, that cater to the needs of surface, topside systems, subsea systems, wells. And I am talking about the E&P system segment.

We have, of course, technological initiatives for refining, and we have a major program that we call Connections for Innovation where we do everything in our reach for the development of technology. We have initiatives around the development of technology for start-ups for residents, for partnerships. So we have a program that allows us to advance in terms of several different technologies.

This is my last slide that shows a comparison between the CAPEX of the E&P segment between the 2023-2027 plan and the 2024-2028 plan. You see the same percentage of investments being made in pre-salt.

But one difference that you can see when it comes to research, we increased our amount dedicated to research by 9 billion in our strategic plan. And in 2028, we are going to reach 30 billion of the amount dedicated to research. I am talking about US\$3.6 billion, and that's related to low carbon economy. The graph indicates that 47% are dedicated to the pre-salt; 8 billion into exploration; and post-salt, 16 billion; and in light blue, others.

So now I would like to give the floor to Claudio Schlosser, who will talk about refining, transportation and marketing.

Claudio Schlosser:

Thank you, Travassos. Good evening, everybody. It's a pleasure to present to you the strategic plan for refining, transportation and marketing.

Our efforts are concentrated around three fundamental pillars. The first one is to be the best option to our customers. And in that regard, we try to cater to their needs and to meet their expectations, guaranteeing best possible quality, competitive pricing, and excellent service levels.

The second pillar is to provide low carbon products. We are committed to energy transition, catering to the needs of an increasingly more aware and demanding market. The third pillar is around optimizing our production chain to maximize the value of our assets that implies managing our activities in an increasingly more integrated manner.

One differentiator of this plan is about the refineries, and that gives us a highly competitive advantage in terms of integration between the assets, and that will be applied towards reaching a higher efficiency of these assets in refining and logistics and consequently, higher energy efficiency.

A very relevant milestone of that is to focus on efficiency and competitiveness in all of our assets, which is a broader perspective vis-à-vis the previous plan that was only focusing on Rio and Sao Paolo. So keeping Petrobras integrated is a key driver of the plan. We will seek to achieve a strong position in the demand for fossil energy and for that, the Brazilian market is strategic for us. It's the best way for us to monetize our oil reserves and to enable our growth in biofuels.

This slide highlights a few factors that corroborate towards the strategic importance of Brazil. One aspect is that Brazil is the eighth largest global consumer of oil products with a significant potential for increased demand, considering the low per capita consumption. We already have an energy mix based on renewables with biofuels accounting for around 23% of the transportation sector.

Another very relevant aspect is that Brazil has an oil surplus and a deficit in oil products. This gives us economic advantage in refining. Petrobras also has this natural vocation for biorefining due to the availability of local feedstock.

In a nutshell, Petrobras will walk hand in hand with the development of Brazil in biofuels and renewables. This will allow for an optimization of our logistics and refining assets, maximizing the value of RTC.

This slide analyzes our expected evolution in the demand for fuels in the transportation segment in Brazil. In terms of heavy-duty vehicles, we foresee an increase in the demand for diesel and renewables by 2040.

Brazil is a continent-sized country and 60% of the transportation of cargo occurs through roads and highways. In addition to that, there is also a significant growth opportunity. As you can see in the slide, in the investments of low carbon markets or renewables.

So we have processing and a plant dedicated 100% to the production of renewable diesel. In the case of lightweight vehicles, 80% of our fleet is comprised of flex fuel auto vehicles where there's a mix of ethanol and gasoline. Gasoline, there's a new perspective for an increased demand for gasoline. And that gives us the opportunity to migrate to other areas as is the case with petrochemicals.

When it comes to aviation fuel, the international decarbonization goals, and those that are being discussed in Brazil foster the expansion of the demand for SAF. And to cater to this demand, we are going to build plants around BioJet Fuel.

So the current scenario in Brazil offers us the possibility to see a growth in Petrobras combining fossil and biofuels. We are prepared to leverage these opportunities and to contribute to Brazil's energy transition.

Next slide, please. All right. Our goal as to our refining park is to be among the top in the world by 2030. We will be thinking about smaller energy efficiency rates, under 89. Greenhouse emissions under 30 kg of CO2 equivalent. Our goal is to maintain availability of refineries, at least at 97%. Refineries will reach 100% of pre-salt oil along the lines of our strategy to boost production from that kind of oil.

With the RefTOP program, we have prevented additional cost of US\$589 million in consumption of natural gas, and through improvement of energy efficiency in our refinery operations. We have expanded that program to all refineries, something that was restricted to the Southeastern region of the country, amounting to US\$776 million.

On to the next slide, please. Let me address the RTC projects. These are more efficient and renewable products to improve our refining plants. Our capacity has been increased by 225,000 barrels a day in oil processing by the implementation of Train 2 and the renewal of current facilities. We will also invest in GasLub and REPLAN to produce S-10 diesel oil with high added value.

With the revamping of current facilities, we will help boost production of S-10 diesel oil, preparing through the transition of the S-500. The S-10 capacity will have an additional 290,000 barrels a day by 2028. We are diversifying businesses, focusing on low carbon products, and we will be investing in dedicated plants to produce BioJet Fuel and the 100% renewable diesel, up to 34,000 barrels a day.

Let me point out, a new GasLub unit production capacity amounts to 12,000 barrels for Group II Lubricants, expanding our product offer, focusing on decarbonization products.

On top of those projects, we have been conducting studies in petrochemicals and fertilizers, maintaining our solid project governance. These studies will be approved, provided they give economic feasibility results.

Once again, let me point out that we have a rigorous process to select opportunities to ensure a profitable and resilient portfolio for RTM. That process includes projects under different scenarios, using appropriate rates for each segment and individual decisions

for the FID for each project, and we perform constant reassessments of the portfolio when we conduct our strategic plan revision, making the necessary adjustments. So our portfolio in RTM will have a rate of return that is above 14% a year, showing these projects are indeed robust.

In conclusion, let me show you the RTM CAPEX. In refining, US\$9 billion will be invested. Out of that total, we are at 45% of investments focused on maintenance, improvement, and operational continuity. 40%, dedicated to the expansion of processing capacity and to produce high-quality byproducts. As far as logistics goes, we will be investing US\$2.1 billion to remove logistics bottlenecks, expand the infrastructure, and boost our efficiency.

Low carbon CAPEX will contemplate our five diesel production and dedicated plants for BioJet Fuel and green diesel. And finally, we have US\$4.2 billion allocated to studies and acquisitions that are part of that under assessment portfolio. They will only be part of the implementation portfolio once they are approved. And they are conditioned to the leverage limitations of Petrobras.

This is what I had to say, and I will turn it over to Tolmasquim.

Mauricio Tolmasquim:

Good afternoon, good evening, good morning, everyone. Let me address the Energy Transition and Decarbonization Department.

Let me start by talking about our ambitions as to scopes 1 and 2. These scopes had to do with the decarbonization efforts. Our goal is to have net zero emissions by 2050. We have a new goal that is very daring that despite increasing production by 20%, we will maintain emissions constant in the next five years.

There's yet another goal, which is to have near zero methane by 2030. Again, very important goal because methane has the biggest impact on climate change.

On to Scope 3, it has to do with Petrobras' emissions, and this is new information. This is our new focus. We want to provide more renewable fuels. We want to have a 4x increase of biofuels between 2022 and 2030 when we consider volumes.

As to renewable electricity, our intention is to have a 50% of electricity generation, having renewable sources reaching 50% of our power generation portfolio. We are going to increase our capacity in petrochemicals and lubricants. Again, this is yet another initiative to increase the resilience of our products in that energy transition phase.

Let me point out something that is very important as well, which is often overlooked. Joelson talked about that peak in 2030. This is something new we have to deal with. When we were asked about that production peak, this is what we would like to show you. The peak of emissions will be about the same time frame.

As to the commitments we have made, operational absolute emissions, again, despite implementing 14 new FPSOs, just like Travassos said, emissions will remain constant. The goal is to have a reduction by 2030 when compared to 2050, a 30% reduction. On top of that, to reach that almost net-zero methane emissions will be reducing routine flaring and to reduce the methane injection in the upstream.

As to CCUS, the goal is to double the amount of CO2 captured in the next three years. In other words, in the past 14 years, the Company has captured 40 million tons. In the

next three years, we will be doubling that volume. As to the greenhouse gases intensity, major challenge ahead of us is to maintain that intensity of 15 kg of CO2 per barrel under or below the world average that is between 18 and 20.

Let me address the net zero carbon program. We have goals for Scopes 1 and 2 and Scope 3. As to 1 and 2, we are investing US\$3.9 billion in the 5-year period, an additional US\$1 billion for the decarbonization fund.

Let me now address Scope 3, which is news for the Company. We will be addressing several areas on to wind and solar. Our focus will be basically onshore. We will be conducting studies for the offshore efforts. Investments will be made available or will be announced once we do have in place legislation that has been defined and the first auction is announced. So here, we have investments for both onshore and offshore projects. These are mature technologies that can provide guaranteed returns.

Again, our focus will be on priorities, or partnerships with large companies and large projects, given the size of Petrobras itself. We are analyzing wind measurement studies. We are still in that study phase, not investments per se.

On to CCUS. We are the world leader. Just last year, we captured 25% of all the CO2 that was captured in the world. We are no longer capturing CO2 in oil and gas wells or basins, we are looking for other geological formations, saline formations close to the coast.

We will be running a pilot project in Rio of about 100,000 tons a year. If it is successful, we will then have a hub there. There are several companies that have indicated that if the project is successful, they would be interested in purchasing part of the hub to capture their own CO2 there.

There's yet another area under study, and that is hydrogen, both blue and green. As to the green hydrogen, there's a huge potential out there for the Company. Petrobras is the largest producer and user of hydrogen out of natural gas in Brazil. And there are indications that green hydrogen will be competitive in Brazil. It will be cheaper in Brazil in 2030 than the gray hydrogen. Again, an important area.

And as far as biorefining goes, Director Schlosser mentioned it, we are now working on both land transportation and coprocessing in SAF, BioJet Fuel for aviation fuel. We have dedicated refining facilities for their purpose. We have a biobunker for the maritime applications.

And now, petrochemical. We have Riograndense now processing 100% of vegetable oils. Again, we are present in the entire transportation chain; land, air, and water, sea, and including petrochemicals as well.

In summary, investments in Scope 1 and 2 include decarbonization operations, and this is a horizontal activity, it will involve every department of the Company; exploration, production, refining, logistics, gas, and energy. Again, horizontal activity. And on top of that, you have the decarbonization fund. We are increasing that by US\$600 million, it's going up now to US\$1 billion.

And in Scope 3, we have US\$5.5 billion, US\$5.2 billion to wind, solar, and photovoltaic energies, and these are for profitable projects only. They have to yield returns above the minimum attractiveness rate established by the Company itself; and less for hydrogen, CCUS, and corporate venture capital. And US\$1.5 billion for biorefining activities. As I

said, that would include the areas I mentioned previously. And again, R&D, US\$0.7 billion for low-carbon projects.

In summary, we are almost tripling investments in low carbon. From US\$4.4 billion to US\$11.5 billion. The average CAPEX is 11% for that time frame. It's a growth investment. In the first two years, the volumes are smaller, 6% and 10% and have to do with the financial responsibility we have to have in place. We have to be extra careful to maintain the Company within reasonable financial standards and as time goes by, these rates will increase, reaching 16% in 2028.

Again, we have natural gas, on to the next slide, please. Let me point out that we will maintain the Thermal Complex of 5.3 GW of capacity. Imports from Bolivia; two terminals, one in Bahia with 50 million m³ a day, and another one in Rio with 66 million m³ a day. And on top of that, we do have the processing units in Espírito Santo, Cabiúnas, GasLub and Caraguatatuba.

In terms of expectations for an increase in the gas demand, we have big expectations with an increase in the Route 3 projects, which will lead to an increased to 18 million m³ per day. BM-C-33, with a capacity of 16 million m³ per day, and SEAP, with another 18 million m³ per day. So we are talking in total about 55 million m³ per day.

One disclaimer though, this does not mean the net gas offer. There is a natural depletion in the reservoirs. The net increase is therefore lower than 55 million m³ because part of this additional offer will be replacing what will be depleted. There will also be an increase in the gas pipeline infrastructure with (inaudible) and SEAP and investments will also be allocated to that.

In conclusion, investments in gas move from US\$1.4 billion to US\$3 billion, and this increase is first connected to the return of VBG, no longer divested, and the implementation of the UTE in GasLub.

These are the main aspects that account for this increase. Thank you.

Fernanda Bianchini:

The President will now make some final remarks.

Jean Paul Prates:

Thank you, Fernanda. I was waiting for your authorization. Thank you.

As you can see, we are trying to summarize everything in these three key messages. We will still have oil and gas and integration as the main value driver with economic and environmental resilience, funding a fair transition, which provides accessible electricity to everybody with the lowest possible carbon footprint. We will also intensify profitable low-carbon investments, generating long-term value to society, and private and governmental shareholders as well as investors.

With that, we will build a Petrobras focusing 100% on people, safety and respect for the environment through a solid governance as explained by Director Spinelli, perpetuating value for future generations.

So it's quite simple. Oil and gas is our business. It has always been. We know how to do that. We were a company created by Brazil to do it for Brazil, and we are successful in that regard, with a successful trajectory proven from a technical management standpoint.

So we are highly qualified to do that. And we can do things that are similar to that, that we are familiar with. Exploration, refining, handling gases and liquid fuels. And we will start the energy transition from these points.

That's why we are talking about CCUS, given the geology of the soil, we are talking about wind offshore and onshore because, of course, we also started our history producing onshore, and we went offshore before we depleted the onshore reservoirs.

We are an offshore company. And as soon as possible, that's where we are going to go because that's where the large-scale projects are. To produce green hydrogen, ammonia, and ethanol.

But we have this concern. We do not want to leave anybody behind, either people from inside the Company, people from outside the Company, whether they are suppliers or stakeholders or communities. We are investing in the areas we are investing.

And we are also talking about the environment, and that includes not only Brazil, but also other countries in all of our actions in terms of avoiding damage to the environment and also in terms of promoting preservation through the capital that we generate, and that's entrained in our strategic plan and above everything, safety. We need to do all that with no incidents.

And lastly, and I said that at the press conference, we are here to reach a balance between the governmental policies. And if you are an investor, you know that because we are a state-owned company, and return to investors, which also, of course, requires doing the right thing in each one of the segments and pursuing the profits required by each segment, and we should not be lagging behind any competitor.

And we saw that, the returns are obviously different, but that's how the portfolio should be comprised because it's a given. We will either run out of oil or it's going to be banished by society eventually. So it's all about common sense. There is no fantasy or delirium. We are talking about a very solid operation and a perspective of the future.

This is what our administration is about. Thank you.

Bruno Montanari, Morgan Stanley (via webcast):

First, I want to thank the IR team and the other departments of the Company on the quality and transparency with complementary information. That's really helpful. Sergio, thank you again for the transparency about the return rates of the projects in each segment. Looking at an IRR of 23, 14% and above, 8% for E&P refining and low carbon. How do these levels compare to the minimum acceptable rate to approve new projects in these segments?

Sergio Caetano Leite:

Good evening, Bruno. Thank you for your question. Thank you for the complement. First, I would like to take the opportunity to invite everybody to join us on January 30. We will send you an invitation. I would like to invite you to take a deep dive into this plan. This is the first presentation in this format, as a webcast. But in January, in New York, we are going to receive investors, analysts and the directors that can join us, and you will be able to ask questions to each department. This is in line with President Jean Paul Prates' instructions in terms of us taking on a position of higher transparency.

And to answer your question, an IRR of 2023, 14% and above 8% in E&P, refining and low carbon, this shows the robustness of Petrobras' portfolio. And as you and other people noticed, it's the first time that Petrobras discloses its average IRRs per business area.

In terms of the minimum return rate in our strategic environment, our business strategy does not allow us to disclose these rates. Some businesses are under confidentiality agreements, others are part of our strategy. But I can assure you that all of them will have a positive NPV that will continue to guarantee the profitability of our projects.

It's also important to highlight that the rates that we presented are real, in USD. 23%, 14% and 8% for E&P, refining and low carbon. These are real rates in USD.

Bruno Montanari:

Looking at the production curve and taking as a basis the Company's performance in recent months, it seems to us that there could be a certain degree of conservatism in the projections, judging by the number of platforms that will start operating in the next five years vis-à-vis a 10% decline rate on average. What should happen in the next 12 to 24 months for the Company to be comfortable in revising the medium to long-term curve upwards?

And in the current curve, what does the Company consider as a plateau time for Búzios and Mero? We have seen quite extensive plateaus in the Santos pre-salt. So I would like to understand if this could be one of the sources of upside.

Joelson Falção Mendes:

Thank you for the question, Bruno. It gives me the opportunity to try to solve a very common type of question when it comes to our production curve.

I would like to go back to our projects and the type of reservoir that we have, and the fact that most of them are in ultra-deep waters where the cost of wells and logistics is higher than on shallow waters or onshore. And that requires us to think of a way to rapidly extract the oil in a way that maximizes the recovery factor of these reservoirs. And this is what leads to the decline rate of 10%.

This year, we had a very good performance in the systems that are now going into production. We cannot state that the future will be the same. Mero, for instance, this year had a very good performance as well as Búzios, Tupi. So we have been having a very good performance across the board, but this does not guarantee that this will be repeated in the future.

This year, we started operations in four units, and by the end of the year, we will be starting another fifth unit. But for next year, we only have another one. So the production ramp for FPSO Cidade de Sepetiba, we intend to start its production by the end of the year, and Mero, that will probably start production by next year, will probably sustain this growth in the production curve that will offset this decline.

You asked me what needs to happen in the next 12 to 24 months for us to review these curves. The performance would have to be much higher. The wells would have to respond really well before we review them.

What I can tell you is that the production for this year and for next year are in line with what we were expecting last year. I cannot be either too conservative or take too many

risks. Otherwise, the financial directors will not be able to pay the bills if production does not respond.

So we do a risk analysis of the systems that are about to start production, the systems that are producing, and we have been having a production that's quite in line with our expectations. And we believe that, that will remain the same for the next few years according to what we are forecasting now.

And with a very significant growth in terms of production from 2.8 to 3.2 in five years, the operated production is a bit higher than that because there's a lot of Mero's production, where our production is 40% and 60% from the shareholders and we have to deduct the government part.

So I think that our forecast is quite adequate in terms of production. And of course, we will work towards reaching our forecast. That's our perspective in terms of maybe extract a bit more from our reservoirs and our process as a whole. Thank you for your question once again.

Luiz Carvalho, UBS (via webcast):

A part of the Company's fields is in the process of decline, especially Tupi. Are you considering revamping process or extending production in these fields, specifically for Tupi? How much decline could potential projects mitigate?

Joelson Falção Mendes:

Tupi is a classic case where we intend to have more projects, as is the case with Marlim, Albacora, Barracuda, and Caratinga. In Tupi, we are now having a discussion with the regulator. We and our partners, we are having discussions with the regulator to try to increase the concession period. We will only reach economic feasibility for a new FPSO and new projects; for instance, we do not necessarily need a new FPSO. We could have projects that utilize existing systems, but that will only be feasible if the National Oil Agency grants an extension of our concession, and we are working hard towards that.

And I would say that our short-term perspectives are that we will receive an extension to our concession, and that if it happens, it will enable new projects that we will have to go through the governance of Petrobras, Galp and Shell our business partners. But we understand that Tupi, which is an asset with total production of 1 million BOED, that we can have new projects for it soon.

Luiz Carvalho:

How much of the potential increase in refining capacity of 225 KBPD is still under evaluation, specifically the 8,000 barrels per day, in addition to the capacity already announced at RNEST?

Claudio Schlosser:

Good evening, Luiz, and thanks for the question. It gives me the opportunity to explain what the refining plan is like. The 225,000 barrels per day are included in the portfolio and implantation, and 135,000 related to the expansion of the RNEST. And the rest is a result of the revamps of the current refineries in the refining park.

Luiz Carvalho:

Spinelli, in terms of governance, regarding changes to the statute, maybe you could give us more details about the decision to limit the statute's restriction to the law of state-owned companies, as opposed to maintaining a statute that's more restrictive than the legislation, please.

Mario Spinelli:

Thank you, Luiz, for your question. It also gives us the possibility to further explain this subject. It's important to highlight that Petrobras will continue to follow all of the requirements of the law to nominate its administrators. So the Board's decision to submit to the general assembly, this change was only in an attempt to remove the mention to the Article 17 of state-owned companies, but there's still mentioned to the law of state-owned companies. The statutes are still saying that we will follow the law.

So I must repeat that, this should be made very clear from a perspective of transparency, all of the requirements enshrined in the law of state-owned companies will continue to be enforced.

If the Supreme Court considers eventually in a final decision, not a temporary decision. If there's a final decision eventually considering that these requirements are constitutional, they will not be enforced. If the Supreme Court decides otherwise, they will continue to be enforced as simple as that.

So it's important to clarify that the proposal to change the statutes still makes it clear that the requirements of the law, those that are considered valid from a legal standpoint, will continue to be required.

Rodrigo Almeida, Santander (via webcast):

First, I would like to thank you for the greater details in terms of the decision-making process and approval of the new projects and M&As, in addition to the returns from the different segments of the portfolio. This additional piece of information is very useful for us to better understand the strategy of the Company for future projects.

In petrochemicals, you talked about the expectation to see an increase in demand. I would like to understand from you, how do you see Brazil today, fitting into the industry's global competitiveness scenario, especially with the increase in gas availability in the United States, which brought about competitiveness to the industry there, and the wave of investments in petrochemicals in China? What is the main competitiveness aspect of the Brazilian local industry today? And what are the main points to be developed in the industry so that it becomes more competitive from a global standpoint? Furthermore, could Petrobras interest in petrochemical scale beyond Brazil?

Claudio Schlosser:

Thank you, Rodrigo. As you said, petrochemicals are a global industry. All the major players, Exxon, Total, et cetera, including Braskem, they operate in many different regions. So any decision in that sense must be carefully thought out, taking into account economic feasibility, business opportunities. And on top of that, I have to mention that Petrobras has knowledge and know-how in petrochemicals that can be used for a possible international expansion.

As to a competitive advantage, the Riograndense refinery was a landmark. We had a 100% test of renewable materials. Again, it's a unit that can produce raw materials for the green plastic, and that experience can be replicated in other facilities that can become a very interesting competitive advantage for the country, given the nature and the availability of petrochemical raw materials.

Still on the issue of raw materials, we have a possibility of having more raw materials once SEAP and BM-C-33 become operational. So we have more available raw material. And not only that, but there's also a trend of dwindling gasoline market. So the components that make up the product itself can be redirected to petrochemical naphtha. Again, more raw material availability. As a consequence, that will boost petrochemical industry competitiveness in Brazil.

We may consider the possibility. It has to be submitted to a rigorous analysis, taking into account all the other factors we have mentioned previously.

Rodrigo Almeida:

You have clearly shown the efficiencies in the FPSOs and Búzios, in addition to giving a good idea of cost reduction with wells and interconnection. How do these metrics behave when compared to post-salt projects, especially the effect of revitalization projects in Campos. Would them have the same sustainable metrics?

Carlos Travassos:

Thank you, Rodrigo, for your question. Yes, we do have metrics in place. When we talk about a well, I have mentioned a 35% reduction of pre-salt wells. That's the result of an internal program. It's called PEP-70. And we do have in place a program for the post-salt wells. These are the post 40. This is the number of days that we aim for to include those wells.

Just for your information, in the case of post-salt wells, we had a 49% decrease, which is significant.

When we talk about interconnection, it's more complicated to make that comparison. When we look at post-salt today, we are mostly referring to those revitalization projects. And there are several wells that have been moved. They have been removed from an old unit, and we have the same line in a new area. So it's a new activity. It's not a simple connection.

We do have a program in place, I mentioned that in my presentation, it's called Interliga. We have been able to reduce idle time for ships involved in that kind of operation.

When we talk about FPSOs, again, we have to be careful when we make that kind of comparison. When you take the Marlim, we have removed nine old units. They had been in operation for 20, 25 years, and we have two new units. But a simple analysis would indicate that we have more than doubled the efficiency. Those in Marlim are between 93% and 95% efficiency. Just to give you some figures of the data we monitor at post-salt

Joelson Falcão Mendes:

Let me briefly make a comment about the drilling costs we had in post-salt when we compare 2Q to 3Q data, especially because we have refurbished Marlim. Our drilling costs was about 15 and it's now down at 12, based on what Travassos has just said.

Bruno Amorim, Goldman Sachs (via webcast):

What is the internal procedure to approve acquisitions? How long does it take for each step? Who makes the final decision? Is it the management, or do you need Board of Directors' approval for that?

Sergio Caetano Leite:

Thank you for your question. The internal approval process for M&As is the traditional Petrobras process. There are five gates in total. Each gate has its own requirements and its own approval forum. It has to do with the corporate governance team, the technical committee, CRT committees, among other committees, the Board itself.

And the final word, after careful revision at each step of the way, comes from the Board of Directors, and there are no time frames predefined. That will depend on the complexity of each project. Those that are more complex usually take longer. Those that are somewhat simpler can be finalized in under a year.

I think I have to say that the Board being there will ensure the alignment of these decisions to the global strategy of the Company.

Bruno Amorim:

How flexible are you for M&As if these acquisitions budgeted will become more expensive in the future?

Sergio Caetano Leite:

Bruno, there is some leeway. We have an indication of projects that are currently being considered. They can be replaced, especially if there is variation in the basic premises if a process becomes more expensive or less profitable throughout that analysis phase, as I mentioned.

Again, there is flexibility, but we remain committed to keeping that US\$102 billion, this total investments for the plan. That phase we have started to analyze acquisitions, has to be subjected to an additional governance phase, to make sure the plan is financially sound and monitor that plan in the CAPEX investment phase.

Caio Ribeiro, Bank of America Merrill Lynch (via webcast):

Production expectations in 2024 were below market expectations, about 2.4 million barrels a day, especially due to the revision of production guidance for 2023. Could you give us more color as to maintenance programs in 2024, in which fields should they occur? What about Mero 3 project? When is it expected to start operations?

Joelson Falção Mendes:

I think we have addressed that question for the expected production for next year. I cannot recall off the top of my head, what units will become production. We make those projections every three years for major production programs. It's only natural. It happens that way. There is nothing abnormal there that will lead us to believe that we would have production shutdowns.

This year, we have many new units. Next year will be 1.5, one that will become operational later this year and another one becoming operational next year. Nothing new on the radar there.

Duque de Caxias, which belongs to Mero 2, is expected to become operational in the 2H24. Since we have many new systems, we have many challenges to meet that production forecasts.

Caio Ribeiro:

Does the Company expect to pay additional dividends between US\$5 billion to US\$10 billion in the next five years? How can we expect these dividends to be paid? Should they be linear, happening every year, or are you taking into account dividend yield for each global peers to announce these extra dividends payout?

Sergio Caetano Leite:

Thank you. The potential extraordinary dividend is always submitted to very careful considerations. First, our projections. Cash flow outlook between 18 and 24 months. We take into account cash, reference cash, the cash numbers that the Company defines for its own plan.

And there's a third component, which is the leverage controls. Cash, minimum cash and that leverage control. These are the three elements that take into account when we make a decision as to paying out dividend payouts. It's not linear. It depends on these variables that are analyzed every year.

Decisions are flexible. It's approved at the Board level and then submitted to the shareholders. The goal is to optimize returns. Returns can take place through dividends and an increase in market cap that is directly linked to investments that are made.

Pedro Soares, BTG Pactual (via webcast):

First off, I would like to congratulate you on the disclosure of your plans. You talked about the feasibility studies, or approvals. Could you give us some color as to how you carry out those studies? After it's financially approved, would they have to follow the same procedures used by the projects under the implementation portfolio?

Sergio Caetano Leite:

Thank you for the feedback about the disclosure. As I said, that's the very first time that Petrobras discloses that kind of information. And we are looking forward to sharing more and more information to both investors and analysts.

That additional governance department has that capital A in additional, which is to say it's on top of traditional governance. In the analysis governance, principles remain the same, and we add an additional layer of governance, and that priority remains at maintaining Petrobras' financial soundness, and that governance will analyze every approved project, any possible merger or acquisition and their impact in the finances of the Company for that time frame, five-year time frame, and even a little beyond that. The plan is 2024-2028 plus. We will look a little beyond that time frame. This is a different way of looking at the strategic planning of Petrobras.

Once that financial study is conducted, we maintain that commitment to have a positive return in that soundness scenario. Cash flow generation, our own cash generation is one of our top priorities, and we submit that to governance to ensure standards.

As I said, it's an additional governance to analyze the CAPEX impact, the US\$102 billion, and the financial soundness of the Company. Once that financial analysis is conducted, we keep on monitoring the positive NPV in that robust scenario.

Pedro Soares:

About the IRR of renewable and low-carbon projects, I do not know if it's my interpretation of the slides, but I had the impression it's about 8%. Could you give me more context about the number? Because that rate of return is close to not compensating the Company's cost of capital.

Sergio Caetano Leite:

Pedro, plus or minus, it's at least 8%. That's the average rate of return. I am not going to preach to the choir, any risk will entail some return. Low-carbon projects are more predictable as far as returns are concerned. Contracts are usually long term, implementation risks are smaller. That's why you have that 8% rate, and that just guarantees the cost of capital return.

And it's a long-term project, as if you had a variable income portfolio, if you had some fixed income papers to balance things out. This is one of the reasons behind low carbon project investments.

Monique Greco, Itaú (via webcast):

Congratulations on increasing the disclosure of your plan, the sharing of information as to returns, financial systems and the systems behind projects and acquisitions. That helps us understanding the value generation potential of the portfolio.

You have disclosed the Brent prices for balance and robustness for E&P. What about projects and acquisitions in renewable? What would be the robustness criteria? Rate of return above 8% for wind and solar project? Would that be a minimum required rate?

Mauricio Tolmasquim:

Thank you for your question, Monique. The expected internal rate of return, as Sergio just said, is 8%. And let me point out that that rate does not include leverage. It considers full equity numbers, return of our own capital. When you consider leverage, that would be much higher than that.

I think it's also worth mentioning that a project can only be approved, it has to have positive rate of return under the most pessimistic scenario of energy prices. Again, we are talking about reasonable profitability under pessimistic circumstances.

Just like Sergio put it, we cannot disclose the minimum attractiveness rate, but I can dare say that it is very close to what we are pricing the asset. It will not be much higher than what is expected.

Gabriel Barra, Citi (via webcast):

Concerning the US\$11 billion worth of CAPEX under evaluation, what are the evaluation parameters of these projects? And how soon can we have an answer regarding the feasibility of the projects? What's the minimum return rate the Company expects on these investments?

Sergio Caetano Leite:

Thank you for your question, Gabriel. As I said before, we have an additional governance that increases the guarantee that we are going to respect the indebtedness cap and the NPV, even in a scenario of robustness, in the most conservative cases. After this phase, again, we will seek to assess, to evaluate the positive NPV.

In practical terms, it's hard to disclose the minimum rate of return. This is related to our strategies around investment and some of these projects are protected by confidentiality. So yes, we are evolving in the transparency regarding these projects, but we will not be able to surpass this obstacle, at least not yet.

Gabriel Barra:

The Company has faced some difficulties in meeting the CAPEX guidance given the slightly tighter service industry. If the Company is not able to achieve the desired investment target, can we expect an increase in the extra dividend line?

Sergio Caetano Leite:

Gabriel, it's important to keep in mind that, if you are not able to meet the investment guidelines for a certain year, companies usually postpone their projects. The projects remain interesting, of course, they are not simply eliminated. They are not eliminated due to a slight delay in the implementation of the projects. Then we adjust the schedule.

Of course, there were no considerable delays, but as Directors Joelson and Travassos said, most of the platforms on our plan are already procured.

So Petrobras' strategy is to keep on procuring for the future and decreasing the delays and increasing the possibility of guidance. But in fact, there is a pressure on the supply chain that may lead to some postponement. And if that's the case, the schedule will be redone and the CAPEX will be reinvested.

Considering the extra dividends, the decision is always made considering our governance. We allocate them to shareholders and, if it's approved, we will then pay the dividends. But the investments are not eliminated if there is a slight delay. I would just like to remind you of that.

Rodolfo de Angele, JPMorgan (via webcast):

I would like to emphasize that the improved disclosure of this presentation is very well regarded by us as an evolution. Concerning the strategic plan, Petrobras foresees renewable sources surpassing fossil fuels in the global energy matrix by 2050. And solar and wind are considered value drivers for low carbon. Unlike other regions, Brazil has a predominantly renewable energy grid contributing to a different energy scope. At the same time, with the increasing development of renewable and energy efficiency projects,

now we have an oversupply of electricity, which translates into lower prices. How can Petrobras plan to deliver attractive returns in face of this scenario?

Mauricio Tolmasquim:

Thank you for your question, Rodolfo. First, I would like to make a small correction. We are not considering that renewables will surpass all the fossil sources. Actually, we foresee that renewables will surpass oil. Actually, renewables will comprise 39% of the offer by 2050, oil 20%. But if you look at all fossil fuels, it's 53%, which is a lot more than renewables.

Concerning the demand for electricity, specifically in the case of Brazil, our current scenario is one of an excess of supply. And, as we all know, that leads us to a lower spot price. But we have been having quite high spot prices during the afternoons, which is the hottest period of the day, when solar is working, and we have an hourly price.

In addition to that, we have to consider the medium term. The forecast for the entire world and in Brazil is that the main factor for the decarbonization of the economy is electrification, when used directly by vehicles or buses or through the use of green hydrogen, where you need to use electricity to produce hydrogen. And the global perspective is one of increased decarbonization in the transportation modes.

And in Brazil, in the medium term, the perspectives for hydrogen are quite good. There is a study by Bloomberg, which you probably read, they analyzed 28 markets across the world, indicating that green hydrogen in Brazil tends to be sold at the lowest price among these markets by 2030.

They also mentioned something very interesting that impressed me, that in 2030, according to them, green hydrogen could be cheaper than grey hydrogen produced from natural gas in Brazil. If that happens, we are talking about an evolution of sorts. Demand for hydrogen is huge in petrochemical industries, fertilizers or steel mining. So we would have a huge demand, and for that, we will need renewable electric energy. So in that regard, it does make sense that we have renewables in our energy mix.

Rodolfo de Angele:

Petrobras plans to invest to US\$73 billion in E&P in the next five years, and has a solid schedule of FPSOs starting to operate in the next few years, but the revision of the production curve was modest. Why does not production have a more significant impact? What is the Company's expectation regarding the depletion of the fields? And what is the expected start of contribution from the equatorial margin?

Joelson Falção Mendes:

The biggest contribution we expect to come from these production systems that are starting to operate is that we will be able to maintain the curve we are operating in. We do not expect to see major novelties. We may see a delay here and there due to market issues, which are outside of our control, but advancing is very hard.

Our schedule is quite tight. Usually, we are able to stay within schedule, and the production that will happen in 2028 will reflect the production systems that just started to produce and that will start to produce soon. So it's quite natural that there has not been any significant impact on production. We actually work towards trying to avoid impacts which, in turn, tend to be negative.

About the equatorial margin, as I said before, we will be starting a well this year, if everything goes according to plans. We have another 15 on our portfolio in several of the basins of the equatorial margin, which is quite extensive. The geoscientists do believe that some of these will also be successful.

After that, we can only talk about time to production after we are able to understand the size of the discoveries, which will then allow us to understand the production size and to design a plan that can be submitted to the regulators.

Another major had a very quick development after the discovery. Of course, we are paying attention to that, and we believe that, if we are able to make similar discoveries, our performance will be quite similar.

But we truly believe in exploration. There is a success in failure rate involved in our activities, but since our campaign is quite large, again, it involves 16 wells, and we believe that some of these wells will be successful, allowing us to start production as soon as possible.

André Vidal, XP (via webcast):

In recent years, Petrobras has been consistently making investments below budget in PEs. Why is this discrepancy occurring? Having said that, how confident is Petrobras that it will carry out the US\$18.5 billion in implementation CAPEX planned for 2024?

Carlos Travassos:

Thank you for your question, André. We did have an underperformance of 16%. But to answer your question, we need to analyze, why did that happen? If you do a Pareto analysis, the main reason behind that was how long it took us to engage the rigs. The rigs are taking 300 to 400 days to resume operations, the high technology and the low technology rigs. Currently, these rigs are either mobilized; if not, that's already considered in our strategic plan.

Another reason that led to the situation was the manufacturer capacity in the subsea area, and also our contract with McDermott that brought about an impact on the CAPEX. These situations have been solved or considered.

And that is why we believe that we are going to realize the CAPEX, because what we forecast for 2024 is much more associated to execution than procurement itself.

Conrado Vegner, Safra (via webcast:)

Out of the US\$11 billion worth of projects under analysis, how much of that refers to acquisitions?

Sergio Caetano Leite:

Good evening, Conrado. Thank you for the question. A large portion of the US\$11 billion is allocated to acquisitions. Unfortunately, I cannot give you any further details about what the projects are. They are usually under confidentiality agreements. But to answer your question, most of them are.

Fernanda Bianchini:

Thank you, Sergio. Thanks, everybody. We now close the Q&A session. If there are any additional questions, please send them to the IR team. The event is already available on the Investor Relations website, and soon, the audio will be made available for replay.

Now I give the floor to our CFO, Sergio, for his final remarks. Over to you, Sergio.

Sergio Caetano Leite:

Once again, thanks, everybody, for your presence. I know that some of you are still up, and it's late evening, or late night. We have more than 300 people watching us through the webcast.

And my take-home message is that this plan is feasible and has a high level of reliability in terms of implementation. It's a quite robust plan. In spite of the adverse scenario that we are going to face, it reflects a considerable increase in governance and certainly puts Petrobras on the right path, considering investments in low-carbon shares and strengthening our E&P portfolio and special care with our refineries.

So once again, I thank you for your presence. And please, be in touch. If you have any questions, just reach out to our IR department. And if I do not see you before that, see you in New York in January.

Thank you. Good night.