Good afternoon, everybody. Welcome to TotalEnergies Sustainability and Climate Workshop. It's a full afternoon dedicated to sustainability. So I hope that you got time to download our Sustainability and Climate report, which is very rich in terms of information. And today, the idea is really to illustrate the report. So we have a program which was set up, which is a new format, again, which was set up to illustrate the report through various sequences. So, we'll have a first sequence, a very quick one, where Patrick Pouyanné will come back on our transition strategy. And then we'll have three sequences: one on climate with different speakers: Aurélien Hamelle, who is our new Director for Sustainability and Climate, who will be talking about our climate ambition. And then we'll have Arnaud Le Foll, about Scope 1 and 2, Jean-Marc Durand and Christophe Sassolas.

You will see that we have plenty of time for questions. The idea this afternoon is really to give time for Q&A. So of course, we'll have sessions, full-day sessions, where you will be able to ask any questions you have. We'll have a Q&A on the climate workshop, a break (15 minutes). For the people who are connected, you will be able to have a break as well online, and then we'll resume after 15 minutes. And then we'll have two other sessions, the “People” workshop with Namita and Pierre, followed by a Q&A. And then another one, which will be dedicated to Africa with Mike Sangster and Jean-Philippe Torres, also followed by a Q&A. So plenty of time for questions and Q&A.

Let's start the afternoon with what is the routine at TotalEnergies when we are starting a meeting in the afternoon, which is a sustainability moment. So I'm asking Jean-Philippe to come on stage. Please, Jean-Philippe.
Jean-Philippe Torres – SVP, Africa M&S

Good afternoon, everyone. I'm Jean-Philippe Torres. I'm Senior Vice President, In charge of Africa in the Marketing & Services branch. So, for this sustainability moment, I would like to talk about safety because actually, safety is key in the sustainability of our business. And more precisely, I would like to talk about road safety because road safety is definitely a major risk for TotalEnergies.

Just for you to understand, I will give you two figures. In the Marketing & Services branch, every day, almost every day, we work with 10,000 trucks. And these trucks drive 450 million kilometers a year. So you imagine the risk we have on the road every day. And this is why I wanted to show you one figure, which is the evolution of the number of severe road accidents we had in the company and with our contractors between 2015 and 2023. And as you can see on the graph you have in front of you, this number was almost 70 in 2015, and it was 11 last year.

Obviously, it's not by chance. It's the result of many, many programs implemented at the company level, including the one which is written here, the Safe Driver program, which includes obviously drivers' training, which includes technical specification for our trucks, including cameras, onboard computers, connected to the affiliates, including now anti-fatigue cameras. And all this allowed us to improve, as you can see, our figures and the safety of our operations, and these programs are for us, for the staff of the company, but also for the contractors. And it pays off. And this is maybe the reason or most likely the reason why TotalEnergies was last year the first private company to receive a 3 star in the Fédération Internationale de l'Automobile Road Safety Index.

So this is what I wanted to tell you. Obviously, these results are good, but it's not the end of the story. 11 accidents is definitely too high. We have to work again, again and again, with all our stakeholders to continue to improve the road safety of our operations.

Thank you very much. And now I leave the floor to Patrick Pouyanné.
Good afternoon. By the way, this engagement with the FIA was, in fact, driven by the TotalEnergies Foundation, which has accompanied the Fédération Internationale de l'Automobile and many programs to promote safety on the roads in Africa, in particular where we are involved.

So good afternoon, everybody. I want just to set the scene in a few slides because, of course, as Renaud told you, the purpose of this afternoon is to illustrate the Sustainability and Climate report through different business cases, which will be presented to you. I just wanted to set the scene of the transition strategy we are putting into action. You will recognize the slides. We don't change the strategy. It's a consistent strategy since 2020. And I just wanted to remind you the framework in which the Company is working.

So, we have some macro trends. We know that, in fact, when we look at macro trends, demand of energy continues to grow. And in fact, it grew by an average of 1.8% over the past 20 years. If we look more carefully, in the last 10 years, it is 1.2%. And +1.2% per year is, in fact, in line with the growing population. So today, you have a sort of demand of energy. Why? Because we have a growing population on the planet, and of course, in emerging countries, there is an aspiration to higher living standards, which require more energy. Even if, of course, we have also to counterbalance this growing demand, some energy efficiency gains. But we know that it is one of the challenges, and it is why in the COP28 Consensus - I don't know if you call it Dubai Agreement - there was a call for doubling energy efficiency. I must tell you; I think it is probably one of the most challenging calls because when we observe the long trends on energy efficiencies, we are more around 1.5% per year. And we know that to go to 3% is really one of the strongest challenges.

When you look on the same side, what happened on the supply side, you can see that, in fact, the primary energy demand was up 1.8%, as I told you. When you look at the oil demand, it's 1.2% by the way, over 20 years. So, in fact, population, energy on the last 10 years, and oil demand are growing more or less in parallel.

Of course, we are investing a lot, more and more in renewable energies. But when you look, because of the increase of demand in 2022, renewable energies were just covering 40% of the increase of the demand for energy, and not yet fully. That's why, in fact, during the COP28, there was a second fundamental call, which was tripling renewables. Because if we manage to triple renewable capacity, then at 1.2%, the yearly increase of the demand would be covered by low carbon energy, in fact. And then, of course, we'll have to do more if we want to be able to change the base of the pattern today, which is 80% fossil fuels. But it's just to underline, that's why we supported the Dubai Consensus.

But the two fundamental calls were effectively well, I would say, framed: doubling energy efficiency and tripling renewables. And as you know, the oil and gas production on this side has a natural decline of minus 4% per year, and tripling renewables is not just yet done. As we don't cover yet the annual demand increase, if we do not invest in new oil and gas fields, then there would be a gap, sort of supply
crunch, which will be translated in higher prices, which, as we have observed in the last two years, customers are not fully ready to support.

So, in this framework, the strategy of TotalEnergies and the transition strategy we have decided for the Company is to have, in fact, to work on two pillars. We continue, of course, to support the energy of today and the energy today for us, is oil and gas, because of what I just explained to you. And so that's the first pillar of the strategy, to contribute to, in fact, bring to customers the energy they need today as long as we do not manage to change to go to a decarbonized system. But we also, and it is the second pillar, invest in contributing to build the, what I call the system B, this low carbon energy system, which is required if we want to meet the Net Zero target by 2050.

So, on both sides, on oil and gas, we are focusing on what we call low-cost, low-emission barrels (the presentation will explain you what it means). And we are mostly focusing, in fact, when we look at oil and gas, on gas, LNG, because gas is partly contributing to the transition in two ways. One way is that as renewable energies are intermittent, when you want to produce a firm power on the electricity side, you need to combine your renewables to cover the intermittency with flexible assets. It could be batteries, but gas-fired power plants are in fact, clearly also a type of flexible assets to deliver clean firm power to the customer.

The second reason is that if you manage to transition from coal-fired power plant to gas-fired power plant, the emissions are lower. Of course, gas, you immediately have the question of methane, and we will come back on it. That’s why, by the way, we have strong, very stringent targets on methane emissions in the Company. I remind you that this Company has been there for 100 years. We'll celebrate the anniversary on March 28, next week. And so, this strategy is designed to continue to find a way to go through another 100 years.

Just when we say that we have the ambition to be a net zero company in 2050 together with society, this is a vision of what could be the Company, in fact, in 2050 if we want to reach this net zero. And in fact, we put in this slide on the left side, you have what the IEA NZE, Net Zero scenario energy mix described. It's 60% electricity, 25% bioenergy, and you still have only 15%, 16% of fossil fuel. When we try to set what could be done for the company, obviously, if we want to be net zero, the electricity and renewables need to become the major part of the company. That's why we are embarking on this strategy. For another reason, it is a growing energy in the 21st century because decarbonization will go and there will be fundamentally an electrification.

And we also imagine to bring, to produce some low carbon molecules, either biofuels, hydrogen or I would say, e-fuels (circular CO₂ is e-fuels). And then to keep part of the hydrocarbons, but we put something around 25%. It's a vision and the question for us is how get there.

In terms of emission, why we think it could be Net Zero? Such a company would have, probably, that's a target challenge, would have, we think, 10 million tons of Scope 1 and 2, and so we can find a way to compensate through natural carbon sinks 10 million tons by that time, and would have a Scope 3 around
100 million tons. And there again, that's a challenge that we should offer to other industries the capacity through negative carbon sinks.

So that's a vision. Between today and 2050, there is a lot of work to be done. If we come on this decade, on which we are fully committed, for me the transition strategy we put in place, we must demonstrate we are able this decade to really put it into action, and in particular, to build, to add to our portfolio, a strong and profitable electricity arm business, this low carbon business. You can see that translated: we have the ambition to produce more, in particular, because the electricity part for TotalEnergies in 2023 is still growing (we produced last year 20 terawatt hours). So we want to go above 100 terawatt hours per year. So it will represent 20% of the production.

On the oil production: it's stable. We decided that we should not be looking for growth in oil production in order to be able, if the demand begins to decline, to just to let the natural decline, in fact, take effect. And we have the gas, again, where on the contrary, we consider that investing in gas will support our ambition in integrated power. And we'll also support our customers in many emerging countries who are, in fact, buying gas in order to switch from coal to gas like the U.S. have done. So that's the vision which will be translated from production to energy sales.

And on this slide, this is for me the right index, the right KPI we follow carefully at the Board level and myself, which is: what is the carbon content of all the energy products that the Company sells to its customers, which means that this transition strategy must be translated in less carbon in our sales. And we have this index of 2015, 100. We set ourselves an ambitious target when I compare to some of my peers: minus 25%. I remind you that last year we improved it from -20% to -25%.

We are underway, we have reported today for 2023 - 13%, -13 point something, by the way. And we think we are on the good track. Of course, you can see that it's 1% per year until 2025 and then it's 2% per year because, of course, there is an acceleration, I would say, we are building, we are investing in a lot of renewable farms and assets. This will more and more come to fruition looking forward. By the way, this carbon intensity index, the Board has decided to introduce it, you will see that, as a KPI for the performance shares, which will be attributed to the Company. In the Company, we were using Scope 1 and 2 into variable pay and performance shares. We decided to keep Scope 1 and 2 for the variable pay but introduce this carbon intensity index in the performance shares, which is, by the way, again: do we deliver fundamentally the transition strategy in terms of energy products we sell to customers. Aurélien will come back on it.

Just the framework, the Capex, there is no change. Again, it's fundamentally a disciplined sustainable capital investment for the 5-year plan. We said that we can invest $16 billion to $18 billion per year, 1/3 on these low carbon energies fundamentally in integrated power, but also in some low carbon molecules, SAF, which are requiring during this decade less capital, in fact, than building the, I would say, integrated power business. We are investing the rest of 2/3 in oil and gas. In fact, new projects is around 30%. The rest is maintenance because we have to maintain our assets, which are requiring quite a lot of Capex.
You can see on this slide that we reported the taxonomy figures, which, by the way, I can just say that some people think it's complex. In our case, the taxonomy just reflects exactly, in fact, the investment framework. You can see that we have Capex eligible and aligned around 34%. So that's a transition. Another figure we mentioned on this slide, which is interesting for you: when we invest in renewables, of course, we put in our Capex investments, the equity. But we have, in fact, a policy to keep 50% of our assets to have partners. We prefer to diversify our assets. And in fact, we are also doing it through leverage. We are using leverage to finance these Capex.

When we try to and we make the calculation, which is how much, in fact, in global investments, do we support through our equity in renewables and low-carbon Capex, it's more $20 billion per year. So the 33% that TotalEnergies is investing, allow $20 billion per year of different projects, mainly in the renewable power, to be developed. And so my team told me that with all these figures, there is a good case to be included in SFDR Article 8 funds, but that's your job, this one.

Last slide I want to use because we are here: we have often the question about how do you share value creation within TotalEnergies. We already showed this slide, but we took the example of 2023. Last year, we generated $67 billion of, I would say, added value. We put 1/4, 25% in investment in the company, $17 billion, 1/4, in fact, 1/8 in dividend, 1/8 in buyback coming back to shareholders. The salaries and social charges represent $10 billion and taxes because, in fact, the big stakeholder of TotalEnergies are the states around the planet. We paid almost $25 billion in taxes to different states in the world. Of course, mainly to producing countries, to be clear where we have the assets.

So just to remind you some few figures, which are interesting, I think. Out of this taxes ($25 billion), $16 billion were paid to non-OECD countries. So we are quite a strong stakeholder for many emerging countries, which are developing. We have 100,000 suppliers, which are also benefiting our investments and Opex. We purchase $30 billion per year. So of course, 100,000 suppliers when we are acting in order to push them to integrate, I would say, sustainability, it's a very large work. The supply chain is a long run.

And over two other figures we wanted to put in to highlight, I think, is among our 100,000 employees, we have 65,000 shareholders. So quite a strong commitment. And they own today, they are the largest shareholder in the Company, in fact, the employees. They own now 8% of the capital. As you know, since I'm CEO, every year, we offer them to buy shares with some discount. And in fact, the reality is that they invest the same amount every year, than it was every 2, 3 years. So I would say the commitment to the company is strong. And I'm absolutely convinced that when people speak to me about alignment between shareholders and employees, well it is the main tool we have to align the interest by promoting shareholding by employees. And by the way, it's also a stable group of shareholders, which is fine.

We have also highlighted another element, which is individual shareholders. I think, I'm not sure they include the employees. Do they include the employees? No, I don't know. No. So on top of the employees, 14% of our capital is owned by 1.6 million individuals. And in fact, it's growing. And in fact,
it's grown a lot in France during the COVID. Now it's growing. Last year, it was in the U.S., where we had more individuals buying the shares, so probably through different funds, but we have access to that database. So that's interesting to see. And again, of course, when you see the employee and individual shareholders, it's a group of 22%, which generally are quite stable, in particular, for TotalEnergies because we serve them a good growing dividend through cycles. So of course, the loyalty of the Company to its shareholders is important.

So, I mean it was just the introduction. And now I think it's Aurélien, who is taking the floor to go to climate, and I will let you do.

Renaud Lions - SVP IR

Thank you, Patrick. So just 1 minute for people to set up...

Aurélien Hamelle - President Strategy & Sustainability

Good afternoon, everyone. Thank you, Patrick. I am Aurélien Hamelle, I'm the new President for Strategy and Sustainability. I have the very difficult task of stepping into Helle Kristoffersen's shoes. And what I'll be showing to you today in the next few slides is how everything that Patrick has just presented, our strategy and our transition, how does it translate actually in terms of greenhouse gas emissions for TotalEnergies. And we'll be looking at that from three angles. What have we achieved in 2023? Where are we going up until 2030? How are we going to get there? - And we'll spend some time on that. And finally, we'll also be looking at where does it put TotalEnergies in the broader energy space when you look at the overall evolution of the energy sector.

So first, what have we achieved? Let's take stock of the achievements in 2023. As you can see from our direct emissions, Scope 1 and 2 operated activities emissions, they stood at 46 million tons in 2015. Now in 2023, they reached 35 million tons, which is a steep reduction of 24% on track to deliver the target of 38 million tons Scope 1 and 2 emissions in 2025. And 25 to 30 million tons net emissions, and I'll come back to that afterwards, in 2030. As far as methane is concerned, and again, we'll see some further details afterwards. But as far as methane is concerned, the achievement is also very significant. It's a 47% reduction in 2023 compared to 2020, well on track to deliver the 2025 target of minus 50%, actually possibly a year ahead of plan, and also on track to reach the 80% target of 2030 in our ambition to aim for zero methane. And again, I'll show a little more detail afterwards.

Now turning to the indirect emissions, really addressing how do we help our clients decarbonize, and what are the relevant metrics to look at that? You can see here that our Scope 3 emissions, meaning the emissions from the use of the products we sell to our customers, they amounted to 355 million tons in 2023. And you can see the details around the oil Scope 3 emissions in 2023 down to 227 million tons, again, we maintain the targets to have less than 400 million tons, Scope 3 emissions from the use of the products we sell to our customers in 2025 and 2030. And something that's very important to remember in this respect is that while we do that, we sell more energy to the clients.
So, it's actually more energy, but the same emissions, which is very important. And this takes us to, I think, the most relevant indicator of our efforts in this respect with our clients is the life cycle carbon intensity index that you have here. We have reduced, as Patrick told you, the intensity of the energy mix we sell to our clients by 13% in 2023, and we have the target to reach minus 15% in 2025 and minus 25% in 2030. And Patrick has just commented that before. So, this is where we stand overall.

And now let's look at the details. And what we'll do is we'll be looking at the various levers that we have on all of these fronts, Scope 1 and 2, Scope 3 life cycle carbon intensity. And actually, once I'm done with a lot of figures, I'm sorry about that. Actually, we'll show you some concrete examples of what it is that we do actually in our projects and operations. And this is what Arnaud and Jean-Marc then will be presenting for E&P and Refining & Chemicals.

So, Scope 1 and 2 emissions from our operated activities. Let's look at what we've achieved. We worked some of the path already, that's 2015 to 2030 that you have here. And you can see, as I've mentioned, that we've reduced these emissions by 24%. What's interesting to us to look at the details of that, that you have that on the right-hand side of the slide. Actually, this 24% overall Scope 1 and 2 operated emissions, the 36% reduction for oil and gas upstream activities and 32% reduction for our Refining & Chemicals operated activities. So that's a very steep reduction actually.

And now let's look at some of the levers that we have to achieve that, but we've used already, and that we'll be using up until 2030. What I need to mention is around CCGT that you see here because actually, this one is an increase in our emissions. And this goes back to what Patrick was saying, we need to build a clean, firm power mix that we can deliver to our clients. And to have clean, firm power, you need to have renewables, and we look at that afterwards and how much they contribute to the meaningful decarbonization of our clients' emissions, but we also need to have flexible capacity to make sure that's firm. That's 24 hours a day, 7 days a week. So that's what it is really about.

And then you have all of the other levers. You can see that, the effort in a way, is evenly split between all of them. And I'll comment some of them. And then again, we have examples with Arnaud and Jean-Marc towards there's portfolio management. We've done that in the past few years. We'll keep doing that. There's energy efficiency, consuming less energy in our operated activities. There is flaring and methane, which is a very significant part of the efforts we are undertaking with the industry actually.

And this one is very important. It's about ending routine flaring. We have a policy to have that achieved by 2030. It's about fighting methane leaks, detecting them, repairing them, and it's about putting an end to venting and you have examples of that afterwards.

It's also about using clean hydrogen. You may recall that last year, last September, we launched a call for tenders to procure 500,000 tons of green hydrogen in our European refineries in 2030, and this will be a strong driver to decarbonize our operations. And this is what -- this is one of the actions actually that is presented here under this third green lever. And one last word that's important, too, that will get us to
the 25 - 30 million tons net emissions range. It's about nature-based solutions that are shown here. That's the last green bar that you have on the right-hand side.

What we are doing is, we are investing in nature-based solutions, carbon sinks. We've done that for several years. We'll keep doing that. And we are building a tally of certified carbon credits that we will start using as from 2030 onwards. And this is going to be very important. So, we're doing that consistently. It's an evenly split effort in the course of the decade. And this is what we'll achieve in this last bar here. So, this is what I wanted to mention around our operated Scope 1 and 2 emissions.

Now let's look at the intensity in terms of Scope 1 and 2 emissions. And this one is presented in terms of our equity perimeter. And that's important because it shows the intensity of CO₂ in kilograms that goes into the atmosphere per barrel of oil that is being produced -- per barrel that is being produced. And what you can see, it has decreased already from 20 kilograms per barrel in 2020 to 18 kilograms in 2023. And this is very important because now, this is part of the low-cost, low emissions criteria that we use. That's the low emissions part. This is one of the criteria we look at in making investment decisions in new projects so that any new project must bring a contribution to lowering the average of the portfolio in this respect.

This is a significant driver in terms of lowering the intensity of our portfolio. And you can see that throughout time, by the end of the decade, this is trending towards 13 kilograms CO₂ per barrel of oil equivalent. So that's a very significant decline. And that positions TotalEnergies very well, actually when you look at the industry average in this respect.

Now I've mentioned methane already. Everybody knows that, but I think it's always important to recall why is fighting methane emissions so important? Methane is a short-lived greenhouse gas in the atmosphere, it stays for around 12 years in the atmosphere. So way shorter life span than CO₂. However, it's a very potent greenhouse gas. It has a heating effect compared to CO₂, which is 30 times that of CO₂ when compared actually in the course of 100 years. It's 80 times that in the course of 20 years, I think.

So, methane is key in our industry because the oil and gas industry is one of the significant sources of methane emissions around the globe. And because we have concrete levers to deal with it. That's why it is key, short term, medium term, actually to deal with methane emissions. So, what have we achieved? You can see here that when you look at 2020 as a baseline, we have reduced significantly already on methane emissions. I've mentioned 47% reduction in our operating activities.

We have been awarded for the third year in a row, the Gold Standard in the oil and gas methane partnership, which is about detecting, reporting and dealing with methane emissions. And what we're doing this year in 2024 is we are actually extending our target. We had a target in place already, whereby the methane intensity of our gas production should be below 0.1% come 2030. This year, we are extending that to oil and gas operations. So, by 2030, our oil and gas operations must have a methane intensity that's below 0.1% as shown here.
So, this is -- these are the efforts that we do as a company in our operations. Now because methane is so important and because it can play a significant part in the short-term fight against climate change, we are playing a part in moving the needle for the industry. And how do we do that? Patrick has mentioned COP28 and some of the achievements of COP28. One of the great achievements is the OGDC that was announced during COP28, the Oil and Gas Decarbonization Charter, where international oil companies mainly TotalEnergies, national oil companies have joined together with common targets, namely around methane emissions, and this is one of the significant achievements, frankly, from last December from Dubai.

And what we’re doing, too, in this respect is we are making our drone technology called AUSEA, I’m sure you’ve already heard of that. It’s a drone technology that detects and helps afterwards deal with repair methane leaks. We are making that technology available to 5 national oil companies for their own operations. So, it’s not only about our operations. It’s about NOX operations, so that they can start dealing with their own methane emission. So, we want to play a positive part in the industry in dealing with these methane emissions. And finally, we are supporting the global flaring methane reduction fund by the World Bank. So again, this is about TotalEnergies operations, and this is about what we can do in the industry at large.

Now turning to indirect emissions that I mentioned already before. As you can see here, what we are aiming to do in helping our clients decarbonize really is through Scope 3 and lifecycle carbon intensity, because there's one thing to be kept in mind, our Scope 3, as we call them, the category 11 emissions, meaning emissions from the use of the products we sell, they are the Scope 1 emissions of our clients. So the way to look at that is to look at, okay, how can we help our clients lower their own Scope 1 emissions. That's what it is about. That's what we must aim to do. Otherwise, we're just missing the point. And this is namely what Christophe Sassolas will illustrate in terms of our actions with our large customers afterwards.

So how do we do that? Well, first, we are making our sales mix evolve significantly. And you can see here a projection of what our sales mix will be in 2030 based on the investment strategy we are deploying now, where oil will be accounting for 30% of the energy sales by then. Gas and LNG will be 50%, and renewables, electricity and low-carbon molecules will be around 20%. So that's a significant evolution from today and even more than that from before.

You can see what it will mean in terms of Scope 3 emissions from the use of the products that you have here. It is below 400 million tons emissions, as you can see. And you have on the right-hand side, the levers that are going to be used likely to reduce the lifecycle carbon intensity. Just to get back on that one because that's the relevant metrics to see how we help our clients reduce the Scope 1 emissions. This one is about the emissions generated by the overall energy we sell to our clients compared to the overall volume of energy we sell them.

And when you look at that, you can see that there are several levers to achieve the 25% target reduction from 2015 to 2030. The big one, obviously, the big green bar in the middle, that's selling electricity, clean
electricity to our clients, low-carbon electricity to our clients, which is achieving more or less half of the way, basically. And back to the point on flexible gas assets, this is because we have no clean firm power that we can deliver that to our clients that they will buy that and that we can achieve this decarbonization. That's a significant part.

But other levers play a part too, namely actually the efforts we undertake in relation to our Scope 1 and 2 emissions that I've mentioned earlier because they are part of the life cycle carbon intensity of the energy mix we sell. And there's the shift to gas because gas and it's less CO₂ than the other fossil fuels, low carbon molecules and CCS as a service. So all of these levers play a part in bringing us down to a 25% reduction of the carbon intensity of the products we sell to our customers.

And finally, one thing that's very important is that while this has an impact on TotalEnergies Scope 3 emissions, as I mentioned earlier, actually, what's also important to look at is that these emissions that go in on Scope 3, as shown here, they enable otherwise reductions in emissions. And this is what we need them here Scope 4. These are the enabled emissions assessment that we've made. When you look at 2030, we assessed that our sale of gas, which is a very good substitute to coal in power generation, which emits way less CO₂, half as much, the sale of gas would allow - enable - 100 million tons avoided emissions by then in 2030.

And the same is true, obviously, for renewables. When you compare the renewables mix with the non-renewables mix, we assessed that this would lead to an avoided emissions being enabled in the region of 50 million tons. And that's important to bear in mind because again, Scope 3 cannot be looked at in isolation because they don't really mean anything in this respect. They have to be looked at from the perspective of what are the clients' emissions and what's happening in the atmosphere globally. That's very important in the way we look at our strategy in this respect.

So finally, how does that put TotalEnergies, or where does that put TotalEnergies looking out at the overall energy space? What we are showing here on the left-hand side is where we stand in terms of achievements and targets in our Scope 1 and 2 operated activities reduction efforts. And as you can see, first, though, what we've done so far does outpace what the overall sector has done at large because our reduction is steeper than, actually rather plateauing with some variations of the sector at large.

Now when you look at the targets we have set, they are well in line with both the NZE and the APS scenario of the International Energy Agency as shown on the left-hand side. Now when you look at the lifecycle carbon intensity of the products we sell to our clients, again, the achievements so far, they do outpace the evolution of the sector at large. That’s the first thing. And then our targets they are in line with the APS scenario of the International Energy Agency.

The APS scenario is a scenario that has an implied temperature rise of 1.7 degrees, which is well below the 2 degrees target of the Paris Agreement. So, this is something that shows that the efforts we are doing and the targets we have set, they are meaningful in the overall context of the efforts that have to be undertaken by the energy sector and actually, they kind of lead the way, if I may say so.
So now I'll be turning to Arnaud Le Foll first, who will be presenting some concrete illustrations of what it is that's behind these levers that you've seen in green, blue and red bars, I think that's going to put some flesh on the bone.

**Arnaud Le Foll - SVP, New Business & Carbon Neutrality, E&P**

Thank you, Aurélien. Good afternoon. Arnaud Le Foll, I am in charge of new business, Carbon Neutrality at TotalEnergies Exploration and Production. And I will deep dive with you into some concrete examples from the field, from the assets or the projects on how to implement what Aurélien just presented.

First example, let's go to Nigeria. I'll be starting with flaring and venting. Why? Because actually, flaring and venting is behind 80% of our methane emissions, operated perimeter and 25% of our overall greenhouse gas emission for the upstream. So one example here in Nigeria where we eliminated routine flaring from an asset called OML100. OML100 was actually designed in 1993, commissioned in 1993. You have one central platform, it's the picture on the top, and you have 3 satellites, picture on the bottom. And at that time, this is producing oil. At that time, there was no solution in Nigeria to valorize the gas that was coproduced with the oil. So the design, as it was, was to -- on the satellite platform, separate the gas and flare it as long as we are producing oil. So what we've done is that last year, during the full field shutdown of OML100, we reorganized the technical setup. We sent actually the gas coming on with the oil to the central platform. We have improved the treatment capacity on the central platform. And now the gas is exported and valorized on the market through Nigeria LNG. This help us to reduce by 330,000 tons of CO₂ equivalent, our emissions in a given year.

The second example is about venting. Again, you see the platform here. It's called Elgin, it's in the North Sea, offshore U.K. It's an important asset in the portfolio, producing gas. And as part of the initial design, we had a number of units on Elgin, treatment units, regeneration units, where at the end of the process, you had some quantities, small quantities of gas left, but in low pressure. And there was no way to use that gas and send it into the pipeline to shore. So by design, this gas was vented to the atmosphere. So here, again, what we have done is that in 2020, first, we worked on a unit, we call it a glycol unit. And this low-pressure gas, it was captured and rerouted to the flare, where instead of being vented with the harm that methane has as a global warming power, it was burnt into CO₂ and decreasing in that case, the venting of methane and warming power of our emissions for 4kt equivalent per year. Now the second step, which is coming next year is twofold. First is to continue to capture the vented emission in other units. Second, we will install what we call flare gas recovery system. And third, we will improve the compression network on the platform. And the result of that is that this low pressure gas, as I mentioned, will be recompressed now and will be sent and valorized on the market in the U.K. with the gas produced. The global effect of those two steps, as you can see, is 5kt -- 5,000 tons of methane emissions that will be there reduced on Elgin Franklin in the U.K.

The third example is how we design our facilities now to avoid emissions. Here are examples of LNG plants. The first one on the left, those are the new projects in Qatar, NFE and NFS, the largest LNG projects currently in the world. And here, by design, what we do is that the CO₂ that is coproduced with
the gas, it’s part of actually the fluid that we produce offshore, will be captured -- will be separated, captured, transported, injected and stored offshore in an aquifer offshore Qatar. And that way, we will avoid what was the past design of those LNG plant, which was to vent this native CO₂. So instead of venting the native CO₂, we will store it back underground. And this is significant, as you can see here, because for a plant of this size, it's overall more than 3 million tons of CO₂ that will not be vented and that will be stored back underground.

Second example of what we can do for our next generation of LNG plant is the project of Marsa LNG. Here, it's about fuel gas. And working on fuel gas in the exploration and production is important. Today, fuel gas accounts for more than 60% of our GHG emissions in the upstream. And here to work on the fuel gas, what we've done is that we have designed a plant that is fully electrically driven. And what that means is that instead of using gas turbines to generate power or mechanical power, we will use electrical engines. Instead of using boilers for heat, we will use electrical heaters. And of course, this will be supplied by green energy produced by a large solar plant that we will build as well and which global production of the solar plant will be equivalent to the global need of the LNG plant and with 100% green power. So it's 200 kt of CO₂ equivalent of fuel gas avoided. And this will make this plant benchmark in terms of carbon intensity amongst the energy plants in the world with less than 3 kg of CO₂ per barrel of oil equivalent intensity.

Now of course, we do that on our perimeter, but we work as well with our partners to bring them and make them progress. An example is Petrobras in Brazil. We signed in 2016 a strategic agreement with Petrobras covering, in particular, R&D and technology. And so we've worked with them, and our first example on their new FPSOs, Sepia 2 and Atapu 2, they have incorporated our own design to avoid venting gases from the older tanks of the FPSO. And this is a design that we had implemented in Angola, in Angola on CLOV and that now we are implementing everywhere, and we convinced them to use it on their own facilities. This will be 9 kt of methane avoided together for those two FPSO. The second example is that we took this year, FID for innovative concept, we call it HiSep. And here, the purpose is that when we produce the oil, deepwater, instead of bringing all the feeds to the FPSO, we will separate the gas with CO₂ down on the seabed and reinject it directly into the reservoir. In that way, it's only the oil that is going up to the FPSO, and we can better use the topside and also better energy efficiency of the process on the FPSO. The third element, all those FPSOs will be deployed with closed flare as we have -- as we'll be implementing on Elgin, which I presented.

The second aspect of collaboration is, of course, our drone AUSEA campaigns. We have done 2,000 flights on our own assets since 2022. Now we are deploying as well with our partners. Last year, we had flights in Qatar, in Brazil, in Azerbaijan, in the Emirates. We have signed agreements with national oil companies, Petrobras, with SOCAR, with Sonangol, with Nigeria NNPC, with ONGC in India. And we even went to organize a flight on an asset, the Block 3 in Angola, which is not an asset where Total is a partner, where TotalEnergies is a partner. It's an asset of Sonangol, but we offer them our technology and they use it on their own assets.

And I will now hand over to Jean-Marc to continue downstream of our activities in Refining & Chemicals.
Jean-Marc Durand - SVP, Refining & Base Chemicals Europe, R&C

Yes. Thank you very much. Thank you, Arnaud. So I’m Jean-Marc Durand. I’m in charge of refining and Base Chemicals in Europe. And I will detail you 4 initiatives we are on Refining & Chemicals to slash down our CO₂ emissions on our platforms.

The first one, it's not something new. It's something we do on a regular basis. Every year, we improve our assets, especially the carbon footprint by investing in energy saving projects. But we have decided in the company to change gear and to go far, faster. And we are deploying in 2023, 2024, a $1 billion energy saving investment plan. And so, for Refining & Chemicals, this represents $400 million of budget and 250 projects, which are being implemented today.

What does that mean in reality, as the concrete examples, we are, first of all, improving designs, installing air preheaters or heat exchangers or heat pumps. I have one concrete example, which is recently we stopped part of the Normandy refinery, in Normandy. And we changed the arrangement of the distillation columns. And by doing that, we reduced energy consumption, and we saved 60,000 tons of CO₂ per year. It has restarted. It's successful, and it's a brilliant example.

Second thing is in our process, the heat exchangers, where we recovered all the heat, it tends to foul regularly. So, there are deposits of -- fouling on the heat exchangers. And we are deploying technologies, many technologies by inserts or by a system where we inject ultrasonic waves inside the bundle. And by doing so, we reduce the deposit of the fouling on the bundle. And so, reducing the fouling, we improved the heat efficiency and the heat recovery of the exchangers. It's a bit like your boiler at home when there is limestone on it, it works less good. And there, it's really, typically exactly the same.

The third example I would like to share is simply the fact that by adding more sensors on the field with Internet of Things, for example, sensors, things like that, we can deploy very easily and collecting all this with AI and so on, digital tools. We are improving the knowledge of our operators simply of the way the process is handled and the way the energy can be saved on a permanent basis on the day-to-day activity, or I would say, on a minute-to-minute activity. And by doing so, we are reducing the CO₂ emissions of around 1%. We have already implemented in three of our platforms, and we are developing, the fourth one ongoing.

Very similar to what Arnaud explained, we have electrification of rotating machines. We have a lot of rotating machines. Some of these machines are driven by turbines. Turbines are very efficient, but less efficient in terms of energy. And when we replace them by electrical motors we improve the energy efficiency. And on top of that, you will see just after -- I have an example, we have an initiative on that where we are going to use green electricity, renewable electricity for our platforms. And so at the end, all these machines will have a carbon footprint of 0. It represents with all the machines we have already changed something around 100 kt of CO₂.
Finally, again, very similar to what Arnaud explained, we have flares on our platforms. The flares are permanent because we do need to keep them for safety reasons. And -- but it's not because they are permanent that they must be visible, and one thing we try to do is to minimize them as much as we can. We try to recover the gas, if any, if they have a leakage to the flare system. We try to recover the gas with recycled compressors, and we installed infrared camera, which allows to see if there is a flame still invisible rather than instead of having it visible, we installed an infrared camera, and we see that the security is on, where the flame is not visible in fact. So it's very smart ideas, which at the end, save 80% of flare on the reduction.

All in all, when we add all these 250 projects altogether, it makes up 1.1 million tons of CO₂. So it's huge. It's 5% of our energy of our CO₂ emissions, Refining & Chemicals from 2015. And we have estimated an average cost of $35 per ton. So it's a valuable project also. That was my first initiative.

Second thing I already touched over is a shift to green power supply. My platforms are consuming a lot of electricity. In Europe, we consume 5 terawatt hour per year of electricity. And in the U.S., 1.5 terawatt hour per year. And today, we buy this electricity from the grid. And gradually, we are going this year in 2024 and next year 2025, to turn to 100% renewable electricity for this electricity.

So this is a massive change in terms of the supply of electricity. It represents 2.5 million tons of CO₂ savings for the electricity we consume, and it's 10% of our emission reduction. And for this particular example, I have a little film, which is going to detail a bit more what we do concretely.

(Video)

Now the next initiative is, and Aurélien touched about it. It's to decarbonize our hydrogen, which we are consuming in our European assets. So we are consuming a huge amount of hydrogen in our refineries, 500,000 tons per year which is massive. And today, this hydrogen is mainly produced by steam methane reformer with quite an intensive carbon footprint. And the idea is to switch this hydrogen to green hydrogen, so hydrogen produced from electrolyzers. In the framework, and we do that in Europe because we are using the framework of the EU RFNBO regulation.

As you know, we have launched a massive call for tender for that. with the idea of having this 500,000 tons of green hydrogen delivered to our refineries by 2030. And -- but we walk the talk. We have already started, and we have already two projects which are underway, one with Air Liquide, which is detailed on the right of the graphic, and it's 200 MW electrolyzer and we are going to use half of it.

We are going to supply the renewable electricity, mainly; complement will be from the grid, and this will allow to produce 10 kt per year of green hydrogen, which we are going to consume in 2026 in our Normandy platform. We have a very similar project in Germany on our Leuna platform, with VNG, and it's 2,500 tons of green hydrogen by end 2025.
So it's ongoing. This ambition is huge because at the end, it represents equivalent of 5 million tons of CO₂, which we are going to avoid by this transformation of I would say, grey hydrogen to green hydrogen. So it's a massive step. And we are pioneering in there the way because currently, we are the only one or I would say, the biggest one to go for this massive green hydrogen tender.

The last initiative I would like to share with you is around carbon capture. There, it's a bit less concrete. It's studies. But in our platforms, in my platforms, we have some units which are producing increasingly CO₂. And the point is that if we want to decarbonize this unit in -- namely, for example, the FCC units. If we want to decarbonize this unit, there is no other way than capturing the CO₂.

Capturing the CO₂ is a costly affair. And there, we are studying launching a lot of concepts because the job we want to do is to find ways to derisk this technology and integrate innovation so that we can reduce the cost of it and to make it feasible for the future. So it's ongoing. It's quite a long way, but work is in progress. And by doing so, we will reduce for this particular unit, 0.8 million tons per year.

Back to Arnaud.

Araud Le Foll - SVP, New Business & Carbon Neutrality, E&P

Yes, because when -- as soon as it's captured the CO₂, it needs to be transported and stored, and actually that's why we are building this portfolio of storages in the North Sea for the CO₂ that will be captured on our own assets. And you see here on the map on the left, the red and the blue dots for power plants and refining chemical platforms in western part of Europe. But to store, as well as a service, the emissions of our hard-to-abate customers.

So we are building this portfolio. It's 5 projects today in the North Sea at various stages of maturity. The first one, Northern Lights, will welcome the first CO₂ cargoes early next year. Then we are ready -- we'll be ready in the Q3, Q4 of this year to take an investment decision in the U.K. in the NEP project. Aramis, in Netherlands, we are in the front-end engineering and design phase. So preparing for future FID. And then in Denmark, Bifrost and back to Norway, Luna where we are at the exploration and preapproval phase. So you see a portfolio of projects that were maturing and delivering and increase the storage capacity over time.

Now in Texas, on the right-hand side, you see as well this part of Texas, Northeast of Houston, where we have as well red dots, blue dots, so refining chemical plants and more recently acquired power gen from gas. And here, we seize the opportunity to enter into a project, which is called Bayou Bend CCS with a 25% share through the acquisition of Talos Low Carbon Solutions. And this project is located close to our assets, it's 65 kilometers from the Port Arthur refinery on the right, and 115 kilometers from La Porte. La Porte is the plant you saw in the movie. And we'll have hundreds of million tons of storage capacity that will be available, if and when we elect to deploy capture on the sites that you can see on the map.
Now we have talked a lot about avoid and reduce and there is the last element of the roadmap in the strategy, which is compensate. And of course, even though as we said, we plan to use this -- those credits after 2030, we have to start now to build up an inventory that we'll be able to use later.

So today in the portfolio, we have 11 projects. They have produced 11 million tons of -- 11 million of credits equivalent to 1 ton each at the end of 2023. And this portfolio of 11 projects will -- is expected to deliver 44 million tons accumulated credits in 2030.

So on the basis of a consumption of 10% of this inventory per year, you see that we will be able to use 5 million credits from 2030 onwards with this existing portfolio. In this portfolio, so we have a number of projects. One I want to showcase here is the one in Australia. This is supporting farmers to improve their land management strategies and farming practices. Through that, we act on grazing plans for the cattle. We act on pasture. We act on crop strategy. And by doing so, we get a soil that is richer, with more biomass and more carbon sequestrated in the soil. This, by the way, will help them to reduce the use of fertilizer in the future. And this methodology I just described what -- was actually validated by the Australian authorities as soon as back in September 2023. So it works. It generated the first credits that are now part of our portfolio. What is good with this as well is that we expect it to be able to scale up, whether in Australia or in other countries with intensive farming activity. And I hand it over to you, Christophe.

Christophe Sassolas - SVP - OneB2B

Thank you, Arnaud. So for the last bit before the Q&A, I'd like to take you to our client sites. And so our large clients for a very long-term energy was a very simple matter. They were buying it in one form, be power, liquid form, gas, whatever. And they were buying it short-term, not very worrying very much on the reliability, which is pretty much a definition of a commodity. And of course, the decarbonization journey that all of those clients, industrial, commercial have undertaken, is -- made things a lot more complex. What kind of energy mix should I have today, I need to contract long-term, I'm not sure of the reliability, the cost of the form of energy that I'm going to buy. So two years ago, we figured we would need to help to support them in their decarbonization journey. And so we did set up a team of 30, 40 experts whose job is really to go and help our clients market the decarbonization journey to our client.

And you can see here that we've tackled quite a bit of industry, some of what we call the hard-to-abate and some of the more classic manufacturing, mining, construction industries.

So I'd like to take you to 4 concrete example of what we've done over the last two years with those clients. So I'm going to take you first to the south of Belgium to a site for our customer Holcim, a cement manufacturer. So a typical cement plant, the size of that one in the city of Obourg, produce around 1 million tons of cement -- 1.5 million tons of cement, which translates into 1 million tons of CO$_2$. And the characteristic of cement manufacturing is that 60% of that CO$_2$ is not coming from the heating of the limestone or the coal. It's actually coming from the mineral itself, what the EU is calling mineral CO$_2$. And so there's no other option than to actually try to capture the CO$_2$ at an economic cost. So we've worked many, many months with Holcim, and we came up with a project where basically, they will change the furnace so that we invest more than EUR 400 million in a new furnace, which instead of burning air to
get the oxygen for the commission will be an oxy-combustion. They call that an oxy kiln. They will
capture the CO₂, and they will dispose of the CO₂. So they needed a partner to do what, to produce the
oxygen, give them the oxygen, give them the power that they need today, but also tomorrow because
they will double the power need for the capture of the CO₂, and that will offtake the CO₂. That's exactly
what we've done with them.

So what's already done is that we've actually used the land around the cement factories, there's a lot of
quarries of chalk. There are lakes. So we've built floating PV plants of 45 megawatts. It's all to be
commissioned to provide the electricity. We're actually on the site deployed the first charging point for
the cement truck also. And what we've worked with them, and there's been an award that the EU
innovation fund for that, is that we will offtake the CO₂ toward Antwerp where part of it will be disposed
probably in our Aramis project that Arnaud just mentioned, and part of it can be used in manufacturing
e-fuels. And to build e-fuels, you need CO₂, but you also need hydrogen. And one of the side-products of
the electrolysis is oxygen, which is very often not very used or not very valorized. So the oxygen will be
sent back to the Holcim site to Obourg. So it's a very good example. And you can see that CO₂ stakes are
actually fairly high, both currently and in the longer run.

I'd like to take you now in the middle between the U.S. and France to a second case, with our client, our
partners Saint-Gobain. So Saint-Gobain builds many things, but the 2 main products is the float glass. So
that's the window you can see on all the big building. And also the Gypsum board. So that's a
construction material. And so the characteristics of Saint-Gobain is that some of its products are low
temperature, so they can be electrified. So we will need a lot of electricity, a lot of power. But some of it,
specially manufacturing the float glass, you go to up to 1,500 degrees and there's no way you can
electrify that's why you use gas. So what we've done with Saint-Gobain is in the U.S., we've signed 2
PPAs with them to provide them with 200 megawatts of electricity over 15 and 20 years. And that's from
our Cottonwood and Danish project in the ERCOT in Texas. And in France, we've signed a first-of-a-kind
biogas purchase agreement, which is structured like a PPA, if you want, for power. But to supply them
with 100 GWh of biogas over the next 3 years from our BioBéarn plant in France. And you can see also
the stake for Saint-Gobain, talking about the Scope 1 and 2 stake for the client here.

I got two more examples and I'm done. The third example is data centers. It's a fashionable industry.
There's data centers being built every day on this planet. And with Microsoft, it was probably -- the data
centers are very advanced in terms of sourcing green power. They are big actors in PPA. So of course, we
are providing them with PPA, Microsoft.

But I'd like to focus on the lesser-known aspect is that every data center has on the data center side,
diesel genset generators. Those sites are working 24/7, they are mission-critical side. They cannot shut
down. So they have massive power generator on the site. So we've built in Sweden for Microsoft using
our SAF technology, actually what we call it BESS, battery energy storage system, that allow us to get rid
of the diesel generator and that provide 80 minutes of backup within the architecture of the Microsoft
data center. And so here, you're reaching close to removing any CO₂ depending on the grid, of course,
and the PPA sourcing of the customer.
And my last example will be on the aviation industry. We've been with Airbus. So, I was going to say, take you to Toulouse, but actually the deal is European, so I take you to Europe. And we've been a pioneer with Airbus on the first sustainable aviation flight powered -- fuel-powered flights. And what we've agreed with them is actually to supply them with more than 50% of their SAF needs throughout Europe. So, we're doing that from our site with a dedicated logistics in Germany, in France and in Spain. And of course, that's part of the EU mandate, the incorporation mandate. You know that the EU has set a 2% incorporation mandate for SAF in the jet in 2025, and a 6% mandate in 2030, an obligation. And the second aspect for our cooperation with Airbus is to have a significant R&D program to try to design a 100% “dropin” because today, there's a limitation in terms of engine, in terms of the behavior of the seals of the engine to have 100% SAF in a plane. So, we're designing -- we have an R&D program to get to that point and to be able to run 100% SAF flights on a recurring basis with the existing engine.

And that's about it. What I wanted to say. Thank you.

QUESTIONS AND ANSWERS

Renaud Lions - SVP IR

Thank you, Christophe. Let's move to the Q&A session. We'd like to thank the four of you because it was really insightful. Please stay on stage. So there is no basic rule. So you raise the end, and you can ask a question. Whatever question you want to ask, these gentlemen are here to answer.

If you can just introduce yourself or we'll give you -- I know you very well, but if you can just introduce yourself.

Francois Humbert - Generali

Sorry for being late. I had a very important call because it was for Climate Action 100+. So I know this is important for you. I just want to say, a comment to you, Christophe, I was able to hear what you say. I think you should give more examples of what you're showing, please don't be afraid to give more because the Scope 3 of your clients are very important. So I think -- I mean, I would encourage you to do more. Of course, everyone encourage you to do more, but you should tell more about this, and it's also a message for the top management. And Q&A will -- I mean, questions will come later, but I just want to thank you.

Renaud Lions - SVP IR

Thank you. We have a question here? Yes.

Maurizio Carulli - Carbon Tracker
Two questions, if I may. First, on renewables, TotalEnergies is continuing to invest a significant portion of its CapEx into renewables as a percentage of total CapEx. And this despite the fact that particularly in certain geographical areas, there are difficulties in the profitability of the renewable energy. And some other companies, oil companies are either pausing or retrenching, what make you think that you can continue even in these difficult situations to remain profitable in your projects? And so that is the first question. What TotalEnergies does different with respect to some of the other operators? And also, do you think that this -- the current market conditions can represent some value opportunities for inorganic growth into the segment of renewables. So that is the first question.

The second question on nature-based solutions. So you mentioned that you have 11 sanctioned projects and you want to achieve about, if I remember correctly, 45 million credits by 2030. What are the -- can you make some practical examples in the same way which we did -- of how you are trying to guarantee that these sanctioned projects will be effective because the -- I would say, particularly in the past, some of the nature-based solutions projects for -- in the world, not necessary for Total, where, let's say, less effective than what less perfect than what could have been. So if we can have some examples of the procedures that you are trying to implement in order to be sure that these NBS projects will be executing what they are meant to do.

Renaud Lions - SVP IR
NBS, maybe we can start with this one.

Arnaud Le Foll - SVP, New Business & Carbon Neutrality, E&P

Okay. Yes. Thank you for the question. So the way we work is that we have first, we have our own team of experts in the company. It's a team of 25 people. They come from the métier by the way. Some of them were recruited outside. We found people internally as well. And we look, of course, for projects in various geographies. We identified the technical itineraries. We qualify it ourselves. And then we go, of course, through a process of certification, with a gold standard or Verra using the latest methodologies and the highest level of standard so that we guarantee some quality of the credits that we expect to get. Then like in any project, there is a part of uncertainty, which is we are treating with nature. And at the end of the day, you need constant and close monitoring to confirm that either when you do conservation, indeed, you have an impact on the area that you try to conserve like in national parks, for example, through your actions.

And when you do a removal that you measure constantly that the trees are growing, that the soil as I showed there, is capturing the CO₂, so they do samples to confirm the methodology, confirm the impact. Another element that is really important, I think, in our approach to guarantee the success of the projects is the socioeconomical aspects. And the way we frame our projects or the way we select our project, this element of socioeconomical integration is very important because we do think that first, is the way we should work on the ground. And second, it's a protection of -- project for the future when the population is, of course, adhering to the objectives. And so that's an element maybe that we have in
the way we approach NBS that might not be shared by our competitors in that domain.

Renaud Lions - SVP IR
On the renewable question?

Aurélien Hamelle - President Strategy & Sustainability

On that one, well, first, you know that we have shown that we're reaching the 2-digit return on average capital employed in the integrated power segment. We mean to make that a positive net cash flow business by 2028. And first, you may recall and you have that in mind that we select the geographies in which we invest. So it's not everywhere. And we showed last year, the geographies in which we mean to develop this business because these are deregulated markets where there is value to be captured basically on the markets. It's also about the integrated power market that we aim for. It's not only about renewables. That's a significant brick in there. But it's about making sure that we integrate the value chain in power, and that's the way we can deliver value in these projects. And as Patrick mentioned earlier, actually, we're not going to stay 100% invested in projects. No, once we've advanced those projects and basically derisk them. We go -- the aim is to go to around 50%, keep some merchant exposure.

And with this mix of profile in the projects that we go after, we are able to create value. And we've selected projects, maybe more recently than others in this space, where we've been able to make sure that the metrics we have, namely in terms of price of the electrons, you can look at Germany or the U.S., the recent announcements we've made, that are relevant to deliver net cash flow positive projects basically.

Renaud Lions - SVP IR
Question, maybe the gentleman there -- well, yes, you can. Okay.

Harry Ashman - Robeco

I've got two questions. One is on the carbon accounting on CCS projects. So Slide 32. When you offtake a customer's CO₂, how are you claiming the credits? Because in that example, you're obviously reducing Holcim’s Scope 1 and 2, but are you also counting that against your Scope 1, 2, 3 intensity? And whether the GHG protocol isn't very well set up for that right now.

And the other one is on hydrogen. So 500,000 tons is a great ambition. I think it's really good. You gave examples there of 15,000 tons, and a whole load of suppliers that have responded. In the Air Liquide example, you're getting 50% of the offtake. Why not do it yourselves have more control over the supply and be able to take the whole offtake? What's the rationale for that?
Aurélien Hamelle - President Strategy & Sustainability

On your first question, the CCS that you see actually on Scope 1 and 2, you’ve seen the levels and then Scope 3 are not the same, okay? So there’s no overlap between the 2, that different CCS projects when we plan these levers, we plan for that. They’re different. So we don’t use the same -- we don’t claim the same basically for Scope 1 and 2 reductions and for what we put in front of Scope 3 reductions basically.

Jean-Marc Durand - SVP, Refining & Base Chemicals Europe, R&C

Yes. For the hydrogen, I think, in fact, the answer is exactly what you mentioned. We are developing some projects locally with partners. The point is that if we go that -- at that pace, it will take too long. And so that’s why we went for a bid massive tender so that we change gear. And that’s exactly the purpose of this tender. We have been offered in the first offer, 7x the need of the 500,000 tons. So there is a huge appetite to provide.

I think what the market needs now is a client and the client, we are this client. So that’s the role we play.

Renaud Lions - SVP IR

Yes, maybe a just -- we’ll be moving there. No worries.

Alejandro Vigil - Santander

A couple of questions about your view about cost evolution in terms of the different technologies, looking at hydrogen, looking in SAF which is the potential of cost improvement in these technologies because they are still very expensive, right? That’s the problem of the implementation? That’s the first question. And the second question is in the context of the European and international oil companies, there is a lot of debate if the way of decarbonization is electrification or is carbon sequestration or some other technologies. Your thoughts about which is the right path for decarbonization of oil company. Thank you.

Christophe Sassolas - SVP - OneB2B

Yes, I can answer on SAF, in Europe, there’s an incorporation mandate. So yes, it is expensive. But at some point, it will be mandatory to incorporate 2% and 6%. So whatever the price at some point, that will be a price taking position.

Jean-Marc Durand - SVP, Refining & Base Chemicals Europe, R&C

Maybe on SAF and technologies because you know we have turned refineries into biorefineries. So that’s a first step. In Europe, in order for this to be eligible, it has to be so compliant with an Annex IX B of feed, so waste and residues. The point is that the amount of feed is limited. We are convinced that almost all this feed is going to be turned into SAF, but that’s not going to be enough in order to go to the 2050
environment. And so the question is what is the next step and that things we are thinking of today, studying what is behind the HEFA route of today, what is the next step? And it's work in progress, I would say.

**Arnaud Le Foll - SVP, New Business & Carbon Neutrality, E&P**

Maybe to answer your first question. The way we see it is that it will be a portfolio of technologies and not one technology that takes it all. If we look at our Upstream portfolio, as an example, the example I showed then you can combine them in a given site to some extent. You can have capture alternative CO₂ in rejection in an electrical plant, for example. And the question at the end is what is the most relevant technical solution there. If you think onshore site, probably electrification is the right way to go to consider because you might have a grid nearby. But today, for example, in Norway, our assets are either new assets are electrified, like Johan Sverdrup are getting electrified, so it's possible to consider offshore as well. For CO₂ reinjection, the native CO₂ reinjection is now kind of a standard in any new design that we consider. So at the end of the day, all those pieces will have to come together to achieve the best result here.

**Aurélien Hamelle - President Strategy & Sustainability**

When you look at the macro trends in this respect, if you take the NZE scenario for one, there is both, it's an AND approach. There is thinking NZE scenario in 2030, 1 gigaton of carbon capture that's provided for and there is massive electrification. So frankly, it's about both, and it's about other technologies that we've discussed certainly.

**Renaud Lions - SVP IR**

Question on the other side. Yes, Jean-Luc.

**Jean-Luc Romain - CIC Market Solutions**

You've shown a very interesting example of storing the carbon that will be captured from your client plants in -- the cement plant in Belgium. On your decision to acquire Talos, you decided to resell 2 of the 3 projects. Could you have instead tried to develop capture for external clients?

**Arnaud Le Foll - SVP, New Business & Carbon Neutrality, E&P**

So our strategy is clearly avoid and reduce on our own portfolio. So we give -- we work on projects that are relevant, first and foremost, for our own assets. And that's why the location of the project compared to our own sites and emitters is really important. Bayou Bend was strategically located compared to our our emitters in Texas. So that was the primary target. The other ones, you don't have any emitters from the company nearby. So we think it's -- there will be other developers, have to develop them. But they don't have the strategic meaning for us, and that's how we approach all our projects indeed in carbon storage.
Renaud Lions - SVP IR
Maybe Michele.

Michele Della Vigna - Goldman Sachs

I wanted to ask a more strategic question. So -- we've gone through a period of extremely expensive natural gas, and that has been very bad for global emissions because we've returned to coal growth. Now gas is becoming cheaper again, and that is very good. We see it in your Scope 4 emissions. But on the other side, it also can become a challenge with lower power prices that make more expensive technologies like offshore wind, less competitive. It also makes some of the gas substitutes like green hydrogen, renewable natural gas, less competitive. I wonder if, how that changes potentially your strategy and some of your capital allocation, but also if you think that for Europe to continue to achieve Fit For 55, something needs to happen on the EU ETS on the carbon market, where it needs somehow to be delinked from gas and from some of the recent price pressure that we've seen there.

Aurélien Hamelle - President Strategy & Sustainability

First, we are in volatile prices industry. And when you look at the prices of gas, short-term, that declined compared to last year and the year before that. Having said that, when you look at the need to make sure that on the long run, clients do commit to buy the gas and LNG, namely. When the prices were too high, actually, there was a challenge there because, as you said, the clients were moving back to coal short-term, actually. So there is a need to have that balance so that clients will commit long-term for gas. So I don't see that -- on the contrary, as something challenging our strategy in this respect, certainly.

Now the ETS prices in Europe, they've been going down significantly in the recent past, now in the EUR 50 /ton region. And certainly, there is going to be reflection to be had in the -- at the EU level, looking at what's happening also abroad at the investment signals that are being sent around when you look at the IRA initiative in the U.S., it's not the same direction of things, certainly.

So there will be a need to review that when it comes to the next period of ETS, I agree. But again, long-term, there is going to be an increased demand in the EU in other regions in terms of electrification. So there are mandates, there are regulatory instruments, incentives in place. So we see that happening in Western Europe. We see that happening in the U.S. and Texas as well. So we know there is a trend where the market is there to sustain our investments, certainly in the power markets too.

Patrick Pouyanné - Chairman & CEO

Michele, just to complement, you're right, you gave the answer in your question. If -- it's clear that the EU ETS has to be monitored. If -- and I think the EUR 50 per ton today is quite low. We bet on EUR 100 per ton, maybe more, and then it gives European electricity price around EUR 70 as an average. And in
fact, we use that. So it’s not so high. We don’t bet on EUR 100 per watt hour, including when we bet made some bets on the offshore wind. It’s more around EUR 70 per megawatt.

So I think it’s reasonable to think that in the Europe and then it’s also back to which market. The German market is different from other markets considering their mix. So it’s why what is important in our strategy is in which market do we invest. And that could be -- you could see us selecting some markets rather than others to grow the integrated power. We will not have the same power strategy in all the European markets because of the mix is important on the local price.

So that's where you will see -- so there's no debate about the size of the capital allocation. It's more in which markets do we -- and in electricity, there is a big difference with oil and gas. This -- as you have to understand better where it is. So the German market for us is really one that's most interesting ones because of mixed political decisions of no nuclear, no coal. And so that's what we think.

Renaud Lions - SVP IR
Thank you. Any question? Yes, please, mic.

Will Farrell - Federated Hermes

Interesting to see that there might be some transactions in the future related to your renewables assets and don’t expect you to be able to comment on those. But how do you think about the potential impact on your life cycle carbon intensity target clearly selling those assets will make it harder. But at the same time, we understand that it might optimize your returns and recycling the balance sheet can enable you to develop more renewable plants. How can you help us think about the transition risk profile of the business, given that recycling of the balance sheet?

Aurélien Hamelle - President Strategy & Sustainability

When we say we aim for more than 100 terawatts hour production in 2030, it does include exactly that. It does include the resale of give-or-take 50% of projects. So that's built in our, let's say, our plan. So the 100-terawatt hours objective, which is in line with the life cycle carbon intensity is including the 50% sales that we've always told you we will do because it's about allocating resources like on various projects. So that is very much consistent one with the other.

Renaud Lions - SVP IR
Other questions? Yes, please.

Olivier Eugène - AXA Investment Managers

Olivier Eugène from AXA Investment Managers. Regarding the 10 million tons of CO₂ remaining in Scope 1 in 2050. What type of operations or processes you don't expect to be able to decarbonize?
Aurélien Hamelle - President Strategy & Sustainability

So 2050 is what the company would be in 2050 in a net zero, let's say, scenario or a vision. Now, they are hard-to-abate sectors. RC and E&P have big emitters, as we say. So that's where you would likely find significant emitters in our assets. And that's why you will have that because as you saw, we still have some gas and oil, minority of oil production by then. There will be clean firm power. So that does involve flexible generation. So you do have a mix of assets that still emit CO₂ in our Scope 1 and 2 operated activities in that 2050 vision that we have.

Renaud Lions - SVP IR

Question. Yes, we have a question there, please.

Jean-Damien Bogner - Julius Baer

First of all, thank you for putting the air conditioning so hard that I tend to forget about climate change.

My question is about the gas and the LNG. So you focus a lot in all your reports about that it's a transition energy. And it's true as long as you account that the emissions from like -- from the emissions intensity are lower than other sources of energy. So I'm a bit surprised to see in the report that you have released yesterday that you account for about 300 tons per megawatt hour produced for gas or LNG, whilst most of the science around that sets the bar around 500 or 600. So how do you account for such lower values? Is that for -- due to better efficiencies or what is the source?

Aurélien Hamelle - President Strategy & Sustainability

I'm not sure which one you're referring to, sorry, which value are you referring to?

Jean-Damien Bogner - Julius Baer

In the reports that you have released yesterday, on Slide 45, I believe. There's a nice table that explains like how you use gas as transition energy in specific countries versus oil and gas and you show the intensity even per country. So the values for gas are around 300, 350. And of course, that looks very nice against the values on oil and gas, but just differs from the science.

Aurélien Hamelle - President Strategy & Sustainability

So we do use -- in this respect, the data taken from objective sources like Enerdata, for instance. So we do use objective benchmarks basically to compare the emissions from one source to the other. So that's what we do when seeing this table, I think that you referred to. So -- and the sources actually are provided in the slide and in the table.
So you have the energy sources that we use and the data namely in this. So I think that's what you're referring to. Sorry I don't have that handy here.

**Renaud Lions - SVP IR**
Okay. We have one question here.

**Pierre Devichi - Erafp**

On the avoided emissions objective you have for 2030, is that just a consequence of your projected energy mix that will be more decarbonized than today? Or is there a willingness from you highlighted some examples of Holcim and Saint-Gobain? Is there a willingness to scale this kind of partnerships? Or is that more of a consequence of the natural evolution of the business mix?

**Aurélien Hamelle - President Strategy & Sustainability**

I think it works both ways, frankly. Now we need to accompany our clients in their journey, and this is what Christophe has illustrated with the examples of cement, for instance, of Holcim or Microsoft or others. So we need to accompany them and it takes the demand side to evolve so that we can also make sure that there is a demand to meet our energy sales mix evolution. That -- we are quite confident looking to 2030 because that's medium term. But certainly, it needs to ramp up between now and 2030 and certainly afterwards. So we need to continue these collaboration efforts either on a client-by-client basis, as we've illustrated, our sector-wide initiatives that we also take in air transportation or maritime transportation, for instance. So it has to accelerate and we're working towards accelerating that with our clients with the demand side basically.

**Patrick Pouyanné - Chairman & CEO**

If you come back, you have a slide, I think that you presented earlier. So minus 25% intensity is fundamentally related to our energy mix or our sales mix. You can -- I think you show the road map or it's in the report. I think you had -- if I remember, maybe it's in the report, and I don't know if you show it, but on the -- yes, on the -- it will come -- this one, you can see we achieved minus 25%. It's fundamentally coming from different sources, but you have a big one -- which is produce and sell electricity. So in particular extreme. So that's a big chunk of it. So it's fundamentally changing the mix. That's why we moved to a strategy to establish oil, gas and electricity company wise, but it's linked fundamentally to what our customers will ask. So we are trying to accompany the decarbonization means fundamentally electrification of many processes. But -- so that's why we have this strategy in place, so you have it. It's also increasing the amount of low carbon molecules. It's also at this level in 2030, the gas will contribute when we manage to demonstrate that the customers are shifting. So it's -- this is all sources, these are the levers that we have. But we are -- we are energy producers. And then we have the action which is more the scope 3 actions to try to accompany our customers that was explained by Christophe and Aurélien, you know, that's both.
But this one does not account -- we don't account in the minus 25%, a 300,000 ton of per year saved by Holcim, it's not there. This is their Scope 1&2, in these figures, we account for the energy products we sold, we sell them. So we don't take into our balance sheet any of what is saved by them, be clear. As a difficulty with Scope 3. And we try to get a hint of what we contribute for this induced reduction what we call the Scope 4. But we don't account for the CCS part. We’re counting our balance sheet only what we store from our own assets. The rest is really contributing to the evolution of the demand, but it's not in these figures. We don't try to mix both, to be clear.

Renaud Lions - SVP IR
Any other question, Francois again, if it's a question?

François Humbert - Generali

Just to build on what was said by Christophe, would it be feasible to have more information on your commercial strategy, maybe you don't want to give more, but you have a plan? I'm sure you have a plan, 1. 2, which barriers you see as Total talking to your clients because your clients are our investees. We invest in Saint-Gobain. We invest in these companies. So we may work together to overcome these challenges. So it's a suggestion more than a question.

Yes. And so this is -- is this your plan, the barriers you see and maybe a breakdown of these -- I mean, you don't give figures on this big chunk of green bar, but maybe the breakdown by sector you just show this nice slide of all sectors. How you maybe want to target some others?

Patrick Pouyanné - Chairman & CEO

Not by sector, don't mix. Again, it's ourselves, and we are selling electricity to either for corporate PPAs or through B2C customers. So that's what we will provide and it's linked to what we produce because at the end, we try to find an integration between what we produce and what we sell. So we -- and I think for them, they have to decide themselves if it's profitable or not. And also we engage with them to offer the solutions that they take the decisions to change or not their mix of energy. But if we don't provide solutions, we don't go to them.

That's why we have established this team led by Christophe, specializing having people who are able to speak with a steel manufacturer or a cement producer. So we had put together a team of people, who knows about their business and not just about our energies, which was a limit. So setting this team for me was fundamental because otherwise, we just sent people, who produce a product of energy, and we are not able to understand their logic.

So now we have people in the company, who can speak about the DRI and the challenges of the DRIs. At the end, they will take the decision to invest or not, but we are there to a dialogue, and we invited the
CEO of Holcim to an Executive Committee meeting of Total to engage more, to try to understand what are their own decisions, when they will do it, where in Belgium, in Switzerland or in the U.S., that's their choice, but that's where we have those points.

But for our own commitment, the minus 25% is we engage because we invest, but the mix of the product we sell will be decarbonized by 25% because increase -- again, and Aurélien’s answer was perfect. It's 100 terawatt hour. All that is very consistent. I can tell you have many mathematicians and engineers within TotalEnergies, including the CEO and even if Aurélien is a lawyer. So he controls.

Renaud Lions - SVP IR
We have time for one question. Yes, please.

Lise Moret - Banque Hottinguer
I have one question. In your presentation, there are two very interesting charts. One where we can see that in by 2050, there should be something like 80% of the sales mix that would be exposed to low carbon and electricity, renewable, et cetera but by 2030, it's more the reverse that is still 80% or 75%, I don't remember fossil. so my question is if between 2030 and 2050, the demand -- on the demand side, the demand is not strong enough so that we cannot reach it is 80% share of your sales mix that would be fully green. By how much do you think you can use offsetting and, let's say, CCS to achieve your carbon agenda? And in which proportion of your decarbonization targets, do you think you can rely on those offsetting solutions? Not sure if it's clear.

Aurélien Hamelle - President Strategy & Sustainability
It is clear. You said you have two questions. These are the two questions?

Lise Moret - Banque Hottinguer
I don't remember the second.

Aurélien Hamelle - President Strategy & Sustainability
It's two in one, ok. First, you know the 2050 approach we have is together with society, and this goes back to the discussion just before, basically. And it's also one of the takeaways of COP28 it's transition in energy systems, it's demand and supply basically. So we're working that path. We are on the supply side.

As Jean-Marc mentioned, we are also sometimes on the demand side for our green H2, for instance, but we are working that path with our clients, 2050 is a long way from now. We are making every effort so that we and clients, everybody can take that path onwards. So we have a clear view as to 2030 and where we're going.
When you look at what we've achieved in terms of transitioning from the last 5 years and let's look ahead at 2030, you can see that that's something significant in terms of having this 20% sales of low carbon electricity, low carbon molecules in 2030. So achieving something that's a leap to 2050, 20 years afterwards is feasible based on the track record already achieved.

Now having said that, everybody will have to adjust to what happens. And this is what is the end strategy. It's all of the solutions that need to be taken into account. It's about providing low carbon energy, and we're building that. And it's about also investing in carbon capture technology, nature-based solutions. So we are doing that at a pace that's sustainable and reasonable and we'll continue. Now saying, where to lead in 2050 is a bit far away. I'm not a mathematician, as Patrick said. So I haven't made the math already, but I'll try.

Patrick Pouyanné - Chairman & CEO

But as a technician, I can tell you, we don't think it's achievable to have more than 100 million tons of compensation. 100 million tons is really for me. So we will have -- the demand has -- I mean the demand pattern. And again, we took in that vision. It's a vision of what could be done. We took a reference, which was a net zero scenario of the IEA.

So if the society is moving together in that direction, we will have to do it again. It's a strategy of the company to go together and growing this electricity arm will be because you have more electrification. If you have more electrification, we'll have less emissions. But honestly, at the end, to be -- when we look at it, I would not put 300 million tons instead of my 100 million tons. That would be a gap. So even 100 million tons is, I would say, something which we consider feasible by that time because that means, again, in the NZE scenario I think you have 5 billion to 8 billion tons of CO₂ storage per year. So what is the percentage that Total could find and good thing we will do on our side. We have 2% or 3% of the market. We are not -- so that's -- and we could do a little more for our customers knowing that because we have some capacity, some technologies, but it's that's reasonable, just to be clear. I don't want to tell you whatever it is, we'll do it. Now that's not the answer.

So we'll have to go on both sides. It's a question of changing the supply mix because the customers will change the demand pattern, and we have to work to help them to change. And at the end, the compensation, what we call compensations, sinks -- carbon sinks, maybe it will be DAC as Direct Air Capture. We are looking to these technologies as well because whatever we are sure that we'll need to be net zero, we are sure to have -- to be able to negative emissions. So we are looking to that to see if it's an area of investment for the future as well.

Renaud Lions - SVP IR

I think we need to take the break, we are on time. We can continue the discussion during the break. So we are taking 15 minutes break maximum. We'll go back in 15 minutes. For people connected, stay tuned. We'll be back in 15 minutes. Thank you.
Okay. We are back for the second part of this sustainability and climate workshop. So we welcome Namita Shah and Pierre Bang will be talking about people. And then we'll have again a Q&A session. Namita, Pierre?

Namita Shah - President OneTech, People & Social Engagement

So thank you very much, and good afternoon. My name is Namita Shah. I'm the President of OneTech and of People and Social Engagement.

Pierre Bang – SVP, People & Social Engagement

I am Pierre Bang. I am the Senior Vice President of People and Social Engagement.

Namita Shah - President OneTech, People & Social Engagement

So, we're going to talk to you a little bit about our people. The second part of our sustainability and climate report, and we're going to try to be as concrete as our colleagues have been earlier this morning on the technical side of what we are doing. So, I would like to just begin with some numbers about when we talk about the well-being of our people.

So, in order to be able to ensure well-being, you need to listen to your people. And that means that we pay a lot of attention and use very well the different surveys that we deploy within the company.

We have 3 important numbers on this slide. The first is that of employee engagement. So, our last survey was done in 2022, and we do a pulse survey every other year, and we will be deploying a full survey again this year. And you see that our employee engagement score is 82.4% and which has gone up 2.1% since the last time that we did the survey, the full survey in 2022.

We also follow what we call the care program, and I will come back to that in a little bit more detail after this slide, where, once again, you see our score is 81.5%. And in the last year, we have seen an increase of 2.9 points. The third number that I think is interesting on this slide for all of you is to see that 87% of our employees, they have confidence that in the ability of our company to achieve the ambition that we have shared with you in the first part of this presentation.

So, when we look at all these numbers, just to be very clear, we, of course, look at the questions and compare ourselves not just in terms of progress that we make internally, but also in terms of
benchmarking with other companies. And we work quite carefully on choosing the questions with IPSOS to make sure that IPSOS is able to provide us benchmarks. And in this case, the benchmarks that you see in the previous slide and in this slide, are benchmarks with respect to companies around the world, who have more than 10,000 employees. As a reminder, we, TotalEnergies, we have over 100,000 employees across the world.

So just a little zoom on caring for our employee’s well-being. We started looking at this index a little over a year ago, 1.5 years ago, where in addition to the engagement scores, we want to pick questions, which would help our managers to be able to understand what was maybe not working within their organizations because the only way to work with your employees is to be able to understand what's not working for them.

And if you look at the slide, you'll see very clearly the kinds of questions that we need to look at when people feel that they are part of an organization, they want to know that they're working in safe conditions. They want to feel respected at work. They want to know that we trust them, which is what the question about sufficient freedom and autonomy is all about. They want to have a good time. So, share moments of conviviality and celebrate our successes.

And so, this year, we will be, hopefully, definitely delivering on celebrating our successes with our 100-year anniversary celebrations. They want managers, who listen to them. I think beyond that, they want to know that they're heard. It's fine to be part of a company or a team. But if you're not heard, if you don't have a place, if your voice isn't heard, then it's almost as if you're not there. And of course, the last two, which are very important. People need more and more to be able to be sure that they are balancing their personal life with their work life and not to have too much pressure at work.

So, these are all indicators that we follow. Any manager who has a team of 15 people or more gets their own individual scores to be able to then sit down with their teams to understand the questions on which are the issues and which things might not be working out. And it is really at that level of work that we need to do in order to ensure that every place in the world with different cultures and countries that we work in, that we are ensuring the well-being of our employees.

I will now hand over to Pierre to talk a little bit about beyond the day-to-day work and the day-to-day lives of our employees within our offices. What are the other things that we are putting in place to look after our employees.

Pierre Bang - SVP, People & Social Engagement

Thank you, Namita. We work in more than 100 countries. Every country has its own social standards, regulations, and they are not all the same. So, we have decided through this program of care together by TotalEnergies to implement one worldwide standard benefiting to all our employees. And it's about a program that is based on concrete measures on these 4 pillars that are on the screen.
First one being, of course, the social protection, a quality social protection for the people of the company. The second is around health. We have to preserve the physical and mental health of our employees. And the third pillar is around the family sphere, and I will come back on these three pillars. But the fourth one is about working environment, and I will not comment on this, and I would like to just give a few examples of what it means for us is about building a better place to work. It's about promoting, I would say, a modern and attractive work environment.

We have made decision to empower our people. For instance, we have established clear rules on the remote working, and we empower our people to make a responsible use of remote working while, in fact, they are delivering on their objectives while, in fact, they're also working on the collective intelligence of the organization and connecting with their teams and managers.

There is a very recent initiative, which we started this year, which we call the Green Friday. It's a very interesting initiative where, in fact, Patrick and the Executive Committee is leading by example on this, there is no collective meetings imposed by the management. We love Green Fridays because then every employee in the company has the freedom to organize his work as he wishes, it's every other Friday.

So let me cover now the global benefit programs that we have for our employees, which is, in fact, complemented by additional local initiatives. Can I come back to the slide? Okay. Thank you. So first, is the health insurance plan. There is a supplementary health insurance plan. That is implemented by the company. In 2023, 94% of TotalEnergies employees are covered worldwide by the supplementary health insurance coverage.

We also implemented a health check every two years for each employee. And the score in 2023 is 77% but if you look at these figures differently, you will find out that it's almost 100% because they are 6 countries in the world in these numbers that are mainly Northern Europe, we're talking about U.K., Denmark. We're talking about Belgium. We're talking about the Netherlands, we're talking about France, where the regulation is 3 to 5 years, but the health system in these countries and the access to health centers of quality is not that question.

We have also, and the second topic I would like to cover is more, I would say, a special scheme, a local initiative, which is in the retail African affiliates in the countries we are talking about. There are almost 20 countries that are taking part of this local initiatives. The pension system is not great. And therefore, we have established a program, where the employees are saving some money and the company is -- so 1/3 is by the employee, 2/3 by the company.

It is invested in a strong currency, U.S. dollar or euros. And when they retire, they have the option to select either to take a lump sum or annuities. And then for all countries, we have a debt benefit plan, which is covering 95% of our employees worldwide, where there is I would say, a benefit of minimum the equivalent of two years of gross salary, when a sad situation like that occur.
Now I would like also to talk about the opportunity to take care of the families. We have developed, I would say, a neutral definition of the family for pregnancy or adoption and we ensure for our employees, 14 weeks, childcare leave paid 100% for the primary care parent and two weeks for the second parent. And there is in addition and a guarantee of an average salary increase during the leave.

In 2023, 99% of women of the company have benefited from a 14-week maternity leave with 100% pay. And I would like maybe to take the opportunity to launch the video of Audrey, who recently joined the company.

(Video)

So you see, even the system work in developed countries. And I think this social protection net is reinforcing the sense of belonging of the TotalEnergies family for our employees.

Namita Shah - President OneTech, People & Social Engagement

So I'd like to come back and talk about an important part of our sustainability report, which is adjust orderly and equitable transition plan for our employees. We had begun to talk to you about this a couple of years ago because clearly, when we elaborated our new strategy, there is this question of how do you accompany all the employees to make sure that they do not feel that they are being left behind. How do we give them the skills to be able to help contribute to all the different areas of technological growth that we need and ideas that we need in order to be able to execute on all this?

And so at the start of this new strategy, we took a lot of concrete measures because I will not hide the fact that people who worked in exploration, production or refining chemicals, were worried that maybe in some years, in 20 years, 25 years, people in our company stay for a very long time. So would not have a job. And so we worked hard, of course, to make sure that everybody would have access to all kinds of information and upskilling programs.

And the way in which I can sort of summarize it for you is what we did, I will take one example. Just the fact that we are developing an electricity. Electricity is a new subject for a lot of people in the company. And so, we decided to deploy a 3-day training program, where we would really bring people in, sitting in rooms with live presentations and a lot of interactive work to explain what electricity is.

What is the technological execution that we will need to do? What is the business model of it? What kind of countries do we want to work? And what our strategy is, because it was very important for all our employees to be familiar with this new energy in which we were going to work because we were all very familiar with oil and gas and what we were doing in the oil and gas business. So that's one example of a massive deployment, which covered a large majority of our people to embark them on the strategy of the company.
More specifically, two years ago, we created an organization called OneTech, where we put together all the engineers and researchers working in the different business units in one organization. One of the reasons in which we did it was also to give all the engineers and researchers the reassurance that they would be able to have access to different businesses and to learn and to be able to work on different businesses.

So today, an engineer who works in OneTech is able to work for a few months of the year on an offshore platform for exploration production to work on helping out a problem of supportive operations in a refinery and to help develop a hydrogen project or a solar or a wind project. And so it gives them all that exposure and that confidence. And that added, I’d say, cherry on the cake on that for us has been that they have all understood that their competencies are very transferable, and we have also benefited in different branches and businesses from competencies that we thought a certain business didn't have, but from another business was able to find a solution to a problem.

And last example is very specific. For example, you know that some of our refineries have converted into biorefineries. Very specific programs have been put in place to accompany all the employees on site to help them learn how what it means to be a biorefinery, how to manage their new industrial tool and how they can place themselves in the new organization and the new kind of business that we are going to do. So that is sort of in a nutshell, what we are trying to do to accompany everybody in the transition of, of course, our business and of course, of what is happening in the world around us. Last but not least, talking about a diverse and inclusive workplace. We've shared these numbers with you before. We continue to progress on gender equality, gender diversity and on international diversity to be able to bring to senior level positions people from all kinds of backgrounds, all kinds of countries and, of course, pushing women up along the chain. And we've also worked a lot in these past years with people with disabilities.

And again, it's one of those subjects where when you're in a developed country, there are a lot of rules and regulations, which sort of push you to make things easier in the workspace for people with disabilities. But in a lot of our affiliates in other countries, there is no such sort of external pressure. And now we have over half of our affiliates who have made commitments as to what they would like to do to help people with disabilities feel more comfortable and more integrated in the workspace. And all these numbers are good. And I told you that I would try to be as specific in terms of numbers as examples as we had been before.

But I would like to close with a video, which to just illustrate to you that in the end, pushing all this means that you have to change the culture, and it means that people have to understand how not just why diversity is important, but how you can include people and I hope that this video will illustrate that for you.

(Video)

That's it, end of the presentation.
Renaud Lions - SVP IR

Thank you very much, Namita and Pierre. So we can open the Q&A session. So just same principles, Raise your hand if you have questions. Don't be shy. Yes, we have a question?

QUESTIONS AND ANSWERS

Matthieu Firmian - AXA Investment Managers

OneTech, you said that reminded it's 3,400 engineers and you reminded at the same time that you have more than 100,000 employees at TotalEnergies. In terms of Just Transition, for your own workers only. What is the gap you assess between the people you would need to upskill, retrain in the near future, considering that the energy mix will be 50% on renewables in the future. So yes, what is the gap? Because 3,400 people can be considered as a little bit low? And do you plan to scale, the experiences you had at Grandpuits, for example?

Namita Shah - President OneTech, People & Social Engagement

Well, I think the reason I tried to show you a lot of different examples was to say that we need to accompany people at many different levels. We're not -- you don't have simply a one size fits all program, where you just suddenly offer upskilling to everybody. So the Grandpuits example is an example of where we have learned that when we want to do a conversion of a business model, how to accompany people to acquire the new skills. And clearly, it's something that has taught us how to do it over and over again, when we need to do it.

The second thing that is important is that we don't want people to feel that it is only when it is their site that is in transition that they will have access to information or to the ability to try to do something else. So in the company, we already have a very robust job posting system, where people from all branches where managers from all branches post jobs that are available and people from all branches are applying for these jobs. So there is a lot of -- we encourage cross-branch movement. And if in order to do that movement, a person needs to have an upskilling program, needs to be accompanied depending on the job that they have taken, then we are able to provide that accompaniment. We don't want people to be refused because they don't have the background or the context or the technical skills that they might need to have. So as there are people, who move back and forth from different branches, over time, more and more people are exposed to different businesses and to the acquisition of different skills.

I talked specifically about OneTech, because it is a concentration of engineers and researchers, who have traditionally until two years ago been very much within their own businesses. And these are the people who do all the design and conceptual studies and studies for all of our major projects. And before they
would do it, they would be able to participate in that only for the project of the particular business unit.

Now they have the opportunity to work on these kinds of studies and to learn about all of the businesses. And actually, collectively, we've learned about a lot of new businesses that were not even in the company, for example, hydrogen. So it is different depending on where our people are, but the important thing is -- and then sorry, the last thing is Visa for TotalEnergies is where I explained that we did a 3-day training program for everybody in the organization -- everybody, 100,000 people have access to that to be able to understand and learn about electricity. So we try to accompany people at every level in a different way.

And it's not, by the way, a Just Transition just for the new energies, it's also for what's happening in the world outside. So for example, we are launching this year, a similar program for everybody on Co-pilot, so that they can then become familiar with artificial intelligence, what that can mean and be aligned with the change that is happening in the world outside. And all of the branches have their different specific programs. And this way, we touch the 100,000 people of the company in many different ways. And also beyond because it's not just our direct employees, but often, we have the involvement also of our contractors.

---

Renaud Lions - SVP IR
We have questions online. Maybe I can try, if there is no question here. I have a question. So do you start to struggle to hire new graduates?

---

Namita Shah - President OneTech, People & Social Engagement
No, no and no. We really don't, we do not struggle to hire new graduates at all. We've done a lot of hiring in the past two years in all of the branches, people tend to think we have increased our hiring and it's easy to hire because we are hiring just in the new gas renewables and power sector, where that is actually not true. And again, I can give you a very concrete example. First of all, remember that we hire people all over the world. And this question is mostly asked for us here in France. So that's the first thing. But even here in France, where OneTech exists and where we have our 3,400 engineers, we launched a young graduate program last year where we hired 60 young graduates. We got over 2,000 applications. And we still have people sending us applications, asking when we're going to open the second year of a young graduate program. So no, we really do not have a problem in hiring young graduates.

---

Renaud Lions - SVP IR
Question in the room? Yes?

---

Olivier Eugène - AXA Investment Managers
Do you have an idea of how competitive what you described in terms of health protection? How this package is compared to your peers, compared to other large companies, whether it really makes a difference or not?
Pierre Bang - SVP People & Social Engagement

I don’t have a specific benchmark. But what I can say is that most of the countries and especially in Africa, where we are located and in some other country in development, usually, we are among the best packages.

Chulantha De Silva - GQG Partners

Chulantha De Silva, GQG Partners. Two questions. First, what percentage of your labor pool is sitting in developing markets versus developed markets? Follow-on to that, your legacy or the existing pool of fleet of assets are sitting in call it developing markets. The new systems are coming in other jurisdictions. So there is going to be a dislocation in terms of where you’re building out and where your existing assets are. So how are you thinking about mitigating that dislocation is that in your thought process when developing assets and what will be the outcome for those pools of labor because to date, it's not easy to move people around.

Namita Shah - President OneTech, People & Social Engagement

No, it’s not easy to move people around. I mean I think -- just so that you understand our model a little bit. So we have our central offices. And then in each country, we have affiliates that are up and running. And they hire locally. And of course, that’s the way whether they are in exploration, production, marketing services or refining and chemicals, locally, each affiliate is running their hiring and looking after their packages and their people locally.

And it comes, it happens in the life of the company from time to time that maybe you have to shut down an affiliate or you sell an affiliate or you open a new one when you make a discovery, for example, and you're going to be building a project. When we make a discovery and build a new project, we work into ways. We hire massively locally, of course, to train people to be able to operate, to construct and then to operate our new installations. And so that’s where the training comes in for them right from Day one.

Every time you start a new project, even in an affiliate that already exists, we will provide the training for those people to be able to operate whatever new project we have on the ground. We have very technically complex projects. We need to put a lot of training in place for these operators. And secondly, we send expertise from our head office of international people. So it’s not just European, but a pool of international people, who have had the opportunity to develop all these different expertises to go on to the ground and accompany, an affiliate that is starting up to be able to train people and make sure that the systems are up and running and that people are being trained on the ground locally.

So the idea is not to be able to transfer somebody from an affiliate in Angola to an affiliate in Congo on mass, that's not the kind of thinking that we do. What we think about is how locally do we give them the maximum opportunity to develop their skills for the businesses that we have on the ground locally. So
that's really the approach that we have.

Patrick Pouyanné - Chairman & CEO

If I may add just to come back to your fundamental question, I think that's one big difference between TotalEnergies and other competitors. In fact, first question is probably 50-50 between developed countries and emerging countries. Why? Because we have 100 years anniversary. But this company, we had little hydrocarbons in France, to be honest. And in fact, we have been built in history. We are born in the Middle East and then in Africa, it was Total in the Middle East, Elf in Africa. And fundamentally, the DNA of the company is linked to these emerging countries.

And when you see through the big moves we have done, by the way, in the last 10 years since I'm CEO, it's Brazil, where we have established a very strong position because we consider that -- when I take the helm I say, it's a nice company, a world company, where we are out of Brazil, out of the U.S., out of India, so think to the future of the world. So like Brazil, we managed to grow full and we are establishing not only in oil and gas, but also renewables, with Casas Dos Ventos. We are strong, is one showcase of the integrated strategy.

Second is India, where India, we had nothing, and now we have established with Indian partners a strong position in India and culturally, it's not about only investing in gas and renewables or also having access to technical skills. And Namita, of course, is taking care. She's a godmother of pushing the organization to work with Indians and that's a cultural shift, which prepares the future.

The third country we moved quite in the U.S., but that's different for other reasons. And in fact, when you see the moves, it's less Europe and more of these countries. And if recently, I have appointed Helle Kristoffersen in Asia, it's because fundamentally - she is based in Japan, it's a developed country - but I wanted somebody as the helm of the company to look to the world with different glasses than us as Europeans because for me, our energy world is moving to the East, I would say. This is where the demand will grow, to East and the South and also where, by the way, Middle East producing countries are strong.

So that's very -- we have raised that in mind. And that's clear for us that we have to drive that. And yes, we are historically euro-centric, but -- and we have, in Europe, this transition is accelerated. So it's also for us a field of opportunity to build competencies and skills. But in fact, fundamentally, we are also looking to Africa. Africa is strong in the company, 1/3 of the company, the Middle East. And so that's very well in mind in the way we elaborate the strategy and moving Helle to an Asian countries. I can tell you, she is looking to the way the transition is perceived and in fact, put into action from these countries. And it's quite interesting every two weeks to discuss with her. And so I think this, I perfectly understand your question.

And again, it's a company where the DNA is not in France. In fact, we have built a company abroad and that's very embedded. Sometimes people think we like to go to some risky countries. I think, in fact, this
is where the demand will be and this is where we have to be able to work with. And that's probably one competitive advantage of the company.

Namita Shah - President OneTech, People & Social Engagement

And which translates, of course, locally into jobs and training and skills, very, very high technical skills.

Renaud Lions - SVP IR

We can take one more question, if you have one. But I have one on the platform. We saw the care press release this morning, when can we expect it to be deployed across all the company?

Namita Shah - President OneTech, People & Social Engagement

It's done. It's deployed. It's a question of it's now. And now it's a question of making sure that every single subsidiary works on every single aspect, but it's absolutely -- you don't need to wait for an announcement. It's now. It's in deployment.

Renaud Lions - SVP IR

Okay. Any last question? Thank you very much, Namita, and Pierre.

PRESESENTATION

Renaud Lions - SVP IR

So we are now moving to the last sequence of today, which is about our sustainable transition with a Zoom on Uganda with Mike Sangster and Jean-Philippe Torres. Thank you very much.

Michael Sangster - SVP Africa E&P

Good afternoon, everyone. Great to have a chance to speak to you today about some of our projects in Africa. My name is Mike Sangster. I look after the upstream side of the business in Africa.

Jean-Philippe Torres - SVP Africa M&S

So I can introduce myself once again. So I'm Jean-Philippe Torres. I'm in charge of Africa in the Marketing & Services branch.

Michael Sangster - SVP Africa E&P

So we're going to have a zoom on Uganda. So I want to just start by saying a few words about the Tilenga & EACOP projects. So you can see on the chart on the right-hand side, you have Tilenga & EACOP about 300 kilometers to the northwest of Kampala in Uganda. Two upstream fields: Tilenga, which we operate, and, Kingfisher, which is operated by CNOOC. And of course, the EACOP pipeline, which runs from Kabale in Uganda to Tanga in Tanzania. We have 57% interest in the upstream and 62% in the pipeline.
I think there's about 1 billion barrels of resources to be developed across the 2 fields and about 230,000 barrels per day of production. I think the first thing I want to say is that this is a low-cost, low emissions project. The cost, the CAPEX and OPEX together, is less than $20 per barrel and the emissions is less than 13 kilograms per barrel, which I think was the figure that Aurélien showed you for our target for our portfolio in 2028. They'll be developed with about 400 wells across 29 pads, 8 of which are in the Murchison Falls National Park, which you can see on the top corner of the chart there.

And of course, the EACOP pipeline is about 1,400 kilometers, roughly 300 kilometers in Uganda and the rest in Tanzania. So how was the project progressing? So today, we're over the third of the way through the upstream with 3 rigs running, drilling the wells. The flow lines are being laid. The central processing facility is being built as we speak, and it's going well.

Then on the EACOP side, I think at the moment, we have about 300 kilometers of the pipeline is being delivered to Tanzania and we're commissioning a coating plant at the moment in Central Tanzania and we will start the pipeline in a few weeks' time. So I think this project will create a lot of value for the communities. I mean, obviously, it's a decision by the governments to develop their natural resources. Uganda has 15% in the upstream and both governments have 15% in the pipeline.

It will create value also in terms of employment. I mean, in the construction phase, you can see the figures on the chart. Many positions have been created in the construction phase and we're well on the way to the targets that I mentioned there of the 18,000 direct and 60,000 indirect positions. And again, during the operations phase as well, not as many obviously, but still, 1,200 highly skilled jobs and a number of indirect positions there as well. And also in terms of investments in local goods and services, we see local companies participating in the civil works and in the waste management and scaffolding, security and catering and so on.

And again, we're also doing a lot in terms of training. Training could be in welding. It could be in scaffolding. It could be in driving because we have a lot of driving to do with HCV vehicles. So I think overall, the project is going pretty much according to plan at the moment. I mean it's a challenging project but I say it is a low cost and low emissions project.

Now, one of the big parts of the project is the land acquisition. I think like any large infrastructure project, we have to acquire a certain amount of land. And you can see some of the figures there on the top left-hand side of the chart, there's about 19,000 of households which are affected by the acquisition. 775 of those have the primary residence in the areas impacted by the project. And overall, it's about 6,400 hectares of land, which we need to acquire. And I think the success of the project will only be achieved if we deliver the land acquisition project correctly and fairly.

So of course, we're applying very high standards to the way that we do that and applying, of course, to the IFC performance standards, especially number 5 on the acquisition and resettlement. There are 3 pillars in terms of what we've been doing. Firstly, we want to minimize the impact that we have. So we
prepared at the beginning a very clear framework in terms of how we're going to develop the project, applying, of course, the avoid, reduce and compensate principles and discussing with the communities. The environmental and social impact assessments were approved for both projects in 2019 and 2020.

We survey very closely the land that would be needed for the project. And if we look at EACOP, for example, EACOP doesn't cross any IUCN categorized areas nor does it cross any ramps or wetlands. And then once the construction phase is finished, of the 6,400 of hectares of land, about 5,000 will be restored to its initial condition.

The second part really is about listening to our stakeholders. So we've run lots and lots of meetings, literally thousands of meetings with local communities and with the stakeholders. The compensation process, we provide full compensation for the value of any assets and also an allowance for disturbance, which, for example, in Uganda is equivalent to 30% of the value of the land which has to be acquired and also additional payments when there are delays in the payment process. I think what else is really important there is to have a very accessible and a very transparent grievance process, which we've put in place through a number of means, through our community liaison officers who are on the field on a daily basis, websites, free phone numbers and so on in community meetings.

And you can see that we have had a high number of grievances but most of which have been resolved. And the grievances can cover any sorts of things: people not happy with the valuation, so we had to deal with that, or also people who were not aligned with the survey in terms of number of trees, or the quantity of crops on the land. But also, a lot of the grievances come from people whose land was not affected by the project and they are asking why.

And we've also had a number of independent third-party reviews on the process, I mean by Golder Associates and also by the association known as IBLAC, the Independent Biodiversity and Livelihoods committee, which we put in place ourselves several years ago and they publish a report every year, which is available on the websites. And I think you may have seen as well, at the beginning of this year, that we announced a mission by Lionel Zinsou, the former Prime Minister of Benin, who's actually as we speak at the moment, doing a review of all of our social programs and the land acquisition program.

So then finally, in terms of how do we support the project affected people and the communities. So clearly, we will compensate either in kind or in cash. And if we take the houses, for example, I think of the 775 households that were affected by the project, most of them asked for a new house to be built. And you can see at the bottom of the slide that today, we've handed over 735 of the 752 houses. There are 17 which are under construction and should be completed by May.

We also provide support, obviously, for relocation and what we call transition support. So if someone can't use their land for a certain period of time during the move, then we will provide food support over that period. I think financial literacy, I think, is important as well. We're helping many people to open bank accounts for the first time and making sure that they understand what that means and how to manage that. And there's also an ongoing livelihood restoration program, where again, we will provide
assistance to the people, some vocational training for example, to help them improve the yield from their crops and provide slightly different strain of Cassava, for example, which will grow more quickly and which will grow larger, so it enables them to get more value from the land.

And I think it's important just to say as well that we'll provide a particular attention to the vulnerable people in the community, which could include older people, people that are sick, mental illness and also make a point that any time that we're opening bank accounts and dealing with a family that both the husband and the wife are present at the compensation discussions and opening of the accounts. So I think, rather than listen to me, I think maybe now you can hear from 1 or 2 of the people affected by the project in a short video.

(Video)

Okay. So I think that gives you an idea of some of the real life example of some of the programs that are being implemented. I just wanted to say a few words now about biodiversity in the Murchison Falls National Park. I mean, it is a site recognized for its rich biodiversity. It covers an area of about 3,900 square kilometers. There are a lot of challenges for the park at the moment. There's pressure on the wildlife. The Ugandan Wildlife Authority was challenged in terms of resources, both people and financial. And there is a big issue with poaching. I mean in the park, I mean, for bushmeat and an issue with deforestation and also grazing of animals near the park.

So what can we do to help with that? So I think the actions that we're trying to put in place, I mean, one, I think as I said earlier on, we try to minimize the design of the project to minimize the impact on the park. So for example, the reduced footprint of the well pads. I think in the park, I mean, ultimately, we have about 90 hectares of area in the park, which is going to be used for the well pads and for the roads, keep everything to a minimum height, build bundwalls around the well pads where we're drilling. So there's no visual impact if you're looking across the landscape.

Sound insulation. I mean, the drilling rigs there are almost silent. I mean you don't need ear protection, if you're standing beside the main generator on the drilling rig. You can have a conversation just like this because of the sound insulation. Crossing points for animals when we're laying the trenching for the flow lines and no nighttime movements. I mean there is drilling at nighttime but no nighttime movement in the park. So one thing is to try to minimize the impact. We're also trying to collect data on wildlife and to share it with the scientific community. So for example, we just finished another campaign on elephant collaring in the park with the UWA. We did a number of aerial surveys of the wildlife in the park last year. And we will share that with some of our partners with WCS, with the UWA, with Makerere University in Kampala and with civil society in general.

What can we do to help enhance the management of the park? So we are providing support for some additional rangers in the park and providing them with some tools to improve their effectiveness. I mean, for example, one is called Smart, which is a kind of digital GPS-based tool, which enables them to track better which areas they've surveyed recently and which areas they need to go to in the future to
make sure that they can optimize the use of their time. And I think we'll also do a big campaign this year in terms of removing invasive plant species, which I think will involve the local community, there will be employment for some of the local community and it should cover about 250 hectares.

Poaching, I said earlier on, is a major issue, which does need to be addressed in the park. And part of that as well, I think, is on working with the communities in terms of awareness for the benefit of the park to the local communities. So we have organized a number of programs, consultations and awareness sessions with the communities so they can try and understand better what the benefits of the park are for themselves, understand the interaction with the wildlife. And, for example, if they're going to plant crops near the park, make sure they don't plant crops, for example, which some of the wildlife might want to eat.

So I mean, elephants, for example, make sure that they are different crops, which are more or less attractive. So trying to give advice along those sorts of lines. Overall, the ambition we have is to have a net gain over the next 20 years in terms of biodiversity, focusing on some of the key species such as elephants and lions and also maintain the population of antelopes and kob.

But I think the main thing we're trying to put in place now is what we call a collaborative management partnership between the UWA, ourselves, the government of Uganda and a specialist partner and running national parks. And we're just about to launch a call for tender for that shortly, which should now be put in place and run for a minimum of 10 years and hopefully help on the overall management of the park.

And I think at this stage, there should be another short film as well, just to show what's happening in the park at the moment.

(Video)

And I think just to put that in perspective, I think the first campaign they did in February this year, they recovered 600 snares within 1 week.

So moving on now to renewables within Uganda and Tanzania. So I mean, as we're doing in many countries around the world, we're implementing our multi-energy strategy. So we have an investment in upstream, in oil and gas in Uganda but we're also trying to develop a renewable power business. So what have we done so far? We are putting in place a 15-megawatt plant within our central processing facility as part of the Tilenga project. So that's being developed and that should be ready for start-up by the end of next year and obviously it will reduce the consumption of gas at the plant to provide electricity.

And we're also looking at a much larger project, a 150-megawatt thermal project which we need to heat a lot of water for the process there. So we're looking to put that in place using solar panels on a much larger scale also in the central processing facility. As far as the, let's say, the grid is concerned, so we have 1 project already in Uganda, which is the Soroti plant, which is a 10-megawatt plant, which started
up a few years ago. And at the moment, we're looking at a couple of new projects, both a 25 megawatts each. The Tororo and Iganga project, which, both 25 megawatts with a plan to sanction them by the end of next year. So that will be 60 megawatts in Uganda.

Then as far as Tanzania is concerned, then we're progressing towards what was called the Kisima 115-megawatt plant, which is pretty much in the middle of Tanzania. And again, we're looking to sanction that project next year as well. And then beyond that, we've signed an MOU with TANESCO, with the Tanzania utility company to look for a 100-megawatt wind farm. And in fact, again, in Central Tanzania, there is a very good area with very good potential for wind power.

So I think our ambition really, between the two countries, Uganda and Tanzania, is to have something between 500 megawatts to 1 gigawatt of renewable power in place. And we can see from what we've done already, that we are saving about 200 kilotons already of CO₂ based on what we have already implemented. And obviously, that would increase as we move towards the ambition for 500 megawatts to 1 gigawatt.

Jean-Philippe Torres - SVP Africa M&S

Thank you very much, Mike. So I am the last speaker of the afternoon. So I know that you have already got a lot of information. But please give me another 10 minutes of your attention because I'm going to talk about what I think is a very important topic for Africa, which is clean cooking. And to start, I would like to give you some background information about clean cooking in Africa and LPG (liquefied petroleum gas).

Do you know that out of the 2.3 billion people, who don't have access to clean cooking worldwide, 1 billion people live in Africa? It means that more than two thirds of the African population has not access to clean cooking. It's not written on this slide but it's my mistake. Do you know that 500,000 women die each year prematurely in Africa because of bad cooking conditions? It is just unacceptable. And to fight this unacceptable situation, we do think like IEA by the way, that LPG is really a key enabler to fight and to develop access to clean cooking in Africa. Why?

First of all, on health, it's quite obvious. LPG produces much less harmful fumes than charcoal and wood, the traditional biomass fuels. Number 2, on economy and gender equality. In the households without access to clean cooking, an average of 2 hours per day is spent to collect wood. And obviously, this task is most of the time, maybe I should say every time, done by women, and even girls.

Third point on environment. When you switch from charcoal or wood to LPG, you reduce deforestation. And last point, on CO₂, LPG has also a positive impact on CO₂, compared to charcoal and wood. And according to EIA, in the last report, they issued in July 2023, achieving clean cooking in Africa for all would save 900 million tons CO₂ per year. So it's, I think, very clear that the use of LPG has to be promoted in Africa, has to be developed in Africa and we do think at TotalEnergies that we have a role to play in this.
How? First of all, we can distribute locally the LPG we produce. And let’s take the example of Uganda. In Uganda, the LPG market is very small. It is 25,000 tons a year, which represents 0.5 kilo LPG consumption per person. Just for you to have some comparison: it’s 4 kilos in Kenya, 4 kilos in Zimbabwe, 9 kilos in Ghana and more than 10 kilos in Senegal. So it’s really very low. And only 5% of the population has access to clean cooking in this country. So the picture is not that nice but we have a good news. The good news is that the project Mike has just spoken about, Tilenga and Kingfisher in Uganda will produce 100,000 tons LPG a year.

So really, what we have to do, is to bring this LPG to the local population. And for that, we have in a way to create a market, not alone, with all the stakeholders. And for that, the action plan is quite clear. Number 1, we have to engage and work with all the stakeholders to promote LPG as a safe, reliable and competitive source of energy. We all know that in these countries, there are sometimes some psychological barriers to use LPG and we have to change this. And for that, we need everybody. We need the NGOs. We need the association, the local association, the women association, which are very powerful. And this is, by the way, what we did in many countries in Africa and also in Asia to convince people to switch to LPG.

Then obviously, LPG has to be affordable. But in this case, it’s really an opportunity because we will produce LPG locally. And today, the LPG, which is consumed in Uganda comes by road from Tanzania and Kenya. Obviously, the transport costs are extremely high. Then, and it’s our job with the industry, is to invest in additional assets, storage, LPG storage, filling center, filling plants and cylinders. And the last point in this action plan, which is, I think, very important, is to try to fix an important problem for bottled LPG in these countries.

When you switch from, let’s say, charcoal to LPG, you need a quite high upfront cost or payment because you have to pay a deposit for the cylinder. You have to pay for the burner. You have to pay for the stand on which you put the cooking pot. And then you have to pay for a minimum of 6-kilo gas. And this is a lot of money for a lot of people, for these poor people. And that’s why we need a solution. And there is another good news, is that now in East Africa, not only in East Africa by the way but in some countries in Africa, we have now digital solutions, which allow people to pay as they consume.

Actually, it’s relatively simple: it’s a smart meter connected to the cylinder. And then people don’t have to pay $20, $30, $40 before starting. They just pay exactly what they consume. And this is a major improvement for this market. So with this action plan, once again, not only done by TotalEnergies alone, with many, many stakeholders but we do think that we can market this LPG produced by Mike and his colleagues and we can impact positively 5 million people locally.

But it’s not the only thing we can do because in Africa we already have quite strong positions in LPG marketing. We already distribute LPG in Africa in 17 territories. It means that we impact today 11 million households, representing more or less 45 million people. It’s not small, it’s still significant but we are convinced that we can do and we must do more. And to do this, there are two ways. The first one is to
enter new territories. So it's what we did last year because we started LPG activities in Rwanda and in Tanzania. In these countries, we had already a retail business or service station business but we started LPG bottled business.

And this year, we intend to start, to launch LPG activity in Mozambique and Namibia. And the second way is to increase our growth strategy, to increase our development in the countries where we have clearly a clean cooking potential. On the slide you have in front of you, we listed few countries, Cameroon, Kenya, Ivory Coast, Senegal, South Africa and Uganda. In this country, we do think that we can do more, that we can impact more people. And that's why all together, we are ready to invest from now till 2030, more than $400 million CAPEX in Africa, in these countries, in order to double the impact we have on LPG business, on clean cooking and it means that we will impact 85 million people by 2030.

And as we intend to do the same thing in India, all together, TotalEnergies intends to impact 100 million people by 2030 with LPG clean cooking. So this is what I wanted to tell you about clean cooking. I think it's a great, great project for TotalEnergies. And let me tell you that in my teams in the countries and the affiliates we have in Africa, all my colleagues are extremely excited and proud to have the opportunity, the possibility, to be part of this great project and to have a concrete action on the improvement of health, of environment, in the country where we operate. So this is what I wanted to tell you.

Renaud Lions - SVP IR

Thank you very much, Mike and Jean-Philippe. So last Q&A of the day. Who wants to start? Yes, we have a question here.

QUESTIONS AND ANSWERS

Harry Ashman - Robeco

I just wanted to clarify something about the route. Mike, you said that the EACOP doesn't cross any IUCN, 1 or 2 or Ramsar wetlands but the feeder pipeline from some of the well pads in the national park does that not originate in an IUCN area, cross a wetland to get to the gathering station or the processing facility?

Michael Sangster - SVP Africa E&P

Yes, that's right. I mean I was talking about EACOP. I mean, obviously, the -- we've got 8 well pads in the Murchison Falls National Park, which is an IUCN Category 2 site. And I think the -- and we have to do a crossing across the -- underneath the river Nile.

Renaud Lions - SVP IR
Yes. Go ahead.

**Alejandro Vigil - Santander**

It's a question about -- in Africa, probably one of the challenges is to find the contractors for such a huge pipeline, which are your contractors? How you develop or establish the standards in terms of the construction works in that project? Thank you.

**Michael Sangster - SVP Africa E&P**

I mean we -- obviously, we have to bring in a number of international contractors. I mean, for example, for the upstream, the main contractor is McDermott but then McDermott will then employ a number of local companies to do some of the civil works, for example. And I mean, yes, we showed some figures in terms of employment. So again, a lot of the contractors are employing lots of people through the process. On the pipeline, I mean, on EACOP, the pipe is being manufactured in China by Chinese company and the company laying the pipeline is a Chinese company as well.

But again, in Tanzania, they have to employ a lot of subcontractors for the construction works and train people to do that. So that's why the employment figures are so big across both projects. So I mean it's a mix of international companies and local companies. And for example, I didn't mention the coating plant, I think, for EACOP is just being commissioned at the moment. And that's actually been done in country, in Tanzania. So the -- at one point the 1,400 kilometers of pipeline will be coated. It's manufactured in China, the insulation will be put on in Tanzania, then obviously laid across the whole length.

**Renaud Lions - SVP IR**

Question. Yes, we have a question here.

**Howard Risby - Federated Hermes**

Just interested in the financing of the project. I understand that a number of financiers and insurers have withdrawn from the opportunity of financing the project due to concerns around the environment and social impacts and there's still a portion of the debt financing that is outstanding. Could you give us some insights into the conversations that you're having with potential financiers and how you're trying to allay their concerns and any insights on when the financial close may happen?

**Michael Sangster - SVP Africa E&P**

We're working actively the financing at the moment. And I mean, you'll see we are, in the coming weeks and months, if we can -- we should be able to close that maybe in a couple of different stages. I think we've done a number of field trips for some of the potential investors, the banks and the export credit agencies that are interested in the pipeline. And I think the best thing we can do is take them there and
show them what's actually happening on the ground.

And I think it dispels some of the perceptions, I think there may be about the project or some of the untruths that I think have been mentioned about the project over recent years. And I think, the second thing is that really now for about two years, we've been having -- we've been much more proactive, I think, in communicating on the project. And any time that we're challenged, any time we see something published, which we think is just completely not true, then we will publish something just showing what's actually been done and try and challenge some of the untruths that have been said.

So I think a combination of the field visits and really public -- I think if you look at the website, the EACOP website via totalenergies.com, you can see a lot of information there on the project.

Renaud Lions TotalEnergies SE - SVP IR
Yes.

Matthias Majaliwa Pedersen - PFA

Matthias Pedersen from PFA Pension. Picking upon your point, Mike, it is obviously a controversial project in some stakeholders' eyes. Wondered if you could shed a bit of light on your own ESG risk assessments in the project as it has developed perhaps notably in terms of the climate aspects and also human rights in terms of compensation and whether that has led to some reflections on TotalEnergies' conduct or perhaps some of the conducts on your partner's behalf or subcontractors.

Michael Sangster – SVP Africa E&P

I would say from my own personal experience, from when I've been on the site, I think what we're doing in Uganda and Tanzania, I think, is raising the bar in terms of what we do as a company. I mean, I think like any large infrastructure project, there are lots of -- we need to acquire land. And I think, as we said, this has been done at high standards in a very professional manner, in a very caring manner. I mean, I think 99% of the agreements have been signed.

Out of the thousands of agreements, I mean, there's only a relatively small number, which have finished up in disputes. I mean, I think if we look at Tilenga, for example, there's maybe -- there was about 40 agreements not signed and many of those are because we can't find the people that own the land or because disputes amongst the project-affected people. There's only about 6 or 7, which are really not happy with the compensation. I think on EACOP, I mean it goes over a much larger area but I think then, again, we're down to a relatively small number of 20, 30 cases where there's been -- they haven't accepted the compensation so far.

So I think obviously, we're trying to make an effort to be sure that we handle that correctly. And in terms of human rights, I mean, again, there's -- any time that we see there's a protest against the project, maybe the people have been arrested or whatever, we always make sure we go to the local police.
stations and looking out for the welfare of the people that are in custody and make sure that we remind
the local authorities of their obligations in terms of how to deal with the people. So I think we're not
responsible for that but we can do what we can to make sure that it's limited and the impact is small as it
can be.

Renaud Lions - SVP IR

Questions?

Patrick Pouyanné - Chairman & CEO

Just to add, I draw one lesson of these onshore projects personally and it's true on both sites in Uganda
and Mozambique. I think one of the problems is that it has been too long. The process of studying and,
because there were some delays in the approval of the project with Uganda authorities, we raised some
expectations from the people which were affected 5 or 6 years ago. And in fact, at a certain point
because of I would say, negotiations, which were on stage, we had to stop and then we came back. That
created obviously something. And the lesson I draw is that, in these types of projects, first, onshore
projects are more complex than offshore. It's clear and we need to have that in mind. So be careful
before to engage.

And secondly, we should tackle with this question of land acquisition much earlier, much earlier and
including of the relocation before even we announce a project. Because what is difficult is to make in
parallel the old project, with the project itself and to take care at the same time of land acquisition. That
creates an interface, which is difficult, by the way and it draw some of the criticism, so my personal
lesson I draw, is that if we have to embark in another project onshore like that, we will have first to take
care of the people before we can embark with the project.

I know that means sanctioning because it's a question of having done it so that when we come to build
it's done and not in parallel, which creates this type of, I would say, controversies. But to be clear, the
behavior of our teams on the ground is really taking care of people, as we said, is fundamental in the
DNA of the company. So I know they are doing their best. The reality is that these projects, it's probably
the most complex we have ever built in the company even if I discovered that in 1934, we built the
longest pipeline between Iraq and Mediterranean Sea in order to bring oil from the discovery in Iraq to
France but there was less people probably by that time today and less media as well. So that's the lesson
I draw.

So it's clear to be honest but as a CEO of the Company when we see some onshore projects coming, we
are looking at hydrocarbons knowing that in renewables, we have a lot of onshore projects, in fact. And
so what we experienced there not just the size of 1,000 kilometer pipeline, but you know -- and we are
facing this question with communities and interface between a wind farm or solar farm and the local
communities even in developed countries. And so that's something where we need to embed all this
capacity to anticipate and to dialogue and to answer questions in the Company because, again,
deploying some renewable projects is also putting some challenges. But I think phasing that in a better
way rather than in parallel is something we should have coped with some of the questions, demonstrating that it's done and then we can do it. And again, doing it quicker because it's too long.

And in Mozambique, to be honest, we suffered as well with the COVID. The relocation of the people in the village was stopped during the COVID because it was impossible to work. We reaccelerated now, it's completely done. And that created, by the way, some also, I would say, some people when I visited them, the village was cut in two parts, the ones which were relocated and the people remained in the old previous village, obviously they were less -- not comfortable. We immediately said we need to relocate them, the COVID unfortunately stopped the work. But after we visited, it was done in 3, 4 months. So it was just a question of the timing and being able to expedite is also important, respecting, of course, the will of the people. But I think that's the lessons I draw worldwide.

So, we -- and if I have asked Lionel Zinsou to make a mission, it's not because they have any doubts but I'm sure there are things which can be improved like Jean-Christophe Rufin explained us in those reports on Mozambique. I read it. And I saw some areas of improvement. So, we have to learn and TotalEnergies will do the same on the ground, it's not because I have doubts but it's that 99% done but we can always improve. And maybe we'll raise some ideas which we have to take on board in order to make it even better. So that's raising the bar. That's what I think.

And having an external eye is also important for me. I think, of course, our teams are doing their best but being able to bring somebody who looks at it from an external point of view is helping as well to improve and even to do it better for the people.

Renaud Lions - SVP IR

Any question? I think it's 5:30. So I think we can close the session on time. Thank you very much. Thank you, Mike. Thank you, Jean-Philippe.

Patrick Pouyanné - Chairman & CEO

You've seen some videos, those videos, of course, are nice. But I think if some of you would like to go on the ground, seriously, because I think the best is to go on the ground to be convinced or to look at it, not to be convinced but just to have your own personal assumption on it because it's quite a controversy. I can tell you, it's something which is heavy to bear. We are organizing the first field trip but if some more people would like, we'll be happy to do it because I think most of the questions, you can see -- you could have in your mind yesterday, you could go and discuss with people on the ground. It's really for us -- and don't worry, it will not be an organized trip where we show you only the great -- good thing.

Yes, we can go but I'm serious because I think I'm convinced, the people who already visited that and are just coming back, some Board members will go very soon. I invited them to go on the ground as well and some bankers, which some teams that I met told me that they changed their mind compared to what they read before. So that's the best thing we can offer today. That's the point.
Renaud Lions - SVP IR

Thank you very much. I would like to thank all the speakers who have been doing a great job. I would like also to thank my team because they have been doing a good job. There are a lot of efforts, lot of energy.

And of course, the ESG team Manon and Benoît are always available, if you have questions, follow-up questions. We hope that you enjoyed the format and we hope to do it again soon.

Thank you very much. Have a nice evening. We move to the cocktail. Thank you.