TOTAL INVESTOR DAY 2020 – 30 SEPTEMBER 2020

PRESENTATION
Ladislas Paszkiewicz TOTAL SE - SVP of IR
Good morning or good afternoon to you all, and thank you for joining our Investor Day. I’m Ladislas Paszkiewicz, in charge of Investor Relations.

After the presentation we had from Helle Kristoffersen yesterday on the Total Energy Outlook, we will focus today on strategy. Patrick Pouyanné and all the members of the executive committee are here, and will address your questions during this afternoon. Patrick will first present the strategy, and there will be a session of Q&A after that. Then will come the time of focused presentations with 2 main presentations, one on renewable with Philippe Sauquet; one on the mobility revolution with both Bernard Pinatel who will focus on biofuels and Alexis Vovk who will focus on electric mobility. A Q&A session will also take place after the presentation.

So this is the program for today. But before we start, I’d like to hand over to Arnaud Breuillac who will present you the safety moment for today.

Arnaud Breuillac TOTAL SE - President of Exploration & Production
Thank you, Ladislas. Today, we’ve chosen to share with you a sad safety moment with the tragic death of one of our contractor staff, a 37-year old rig floor man. The fatal accident occurred on August 23rd at 11 a.m. on our drilling operations in the U.S. GoM.

The incident analysis is still ongoing, but let me present you with our current understanding of what happened. The drillship, Pacific Khamsin, was pulling the riser column out of the water in preparation for a rig move to escape the Storm Laura. This is a routine operation that was executed with no time pressure as the rig disconnection had been decided well in advance. The injured person was removing large bolts from the riser column using heavy-duty pneumatic wrench. The weight of this tool is 150 kilograms, and it was attached to a wrench cable with a 0 gravity compensator.

The tool became jammed and the injured person was working over the tool during the attempts to free it by pulling on the wrench and also by manipulating it manually as you can see on the small schematic. As the tool suddenly became free, the tension in the wrench cable was released and projected the tool upward, hitting the injured person and projecting him from the riser table to the rig floor. Unfortunately, medical efforts at site failed to save his life.

This tragic accident ends a 2-year fatality-free period for the E&P activities and is a shock to our company. An Incident Analysis Committee is working jointly with the drilling contractor, Pacific Khamsin, to determine the root causes of this accident. And preliminary assessments and recommendations have already been shared with local authorities and within Total. Our next steps are to complete the root-cause
analysis and to continue to share learnings and mitigation measures so that every possible information is used to prevent similar occurrence.

Safety is a core value of Total, and we strongly believe that it is a cornerstone of operational efficiency. Our track record demonstrates our relentless drive for improvement and this is illustrated by the frequency rate of recordable injury, which is on a good trend that compares well with our peers. But of course, no complacency as we are more than aware that with safety every day is a new day.

In terms of health, we have limited the impact of the COVID-19 pandemic with a fast and proactive response. We've mobilized very early a crisis management set at group level to support safe continuation of operations around the globe in all parts of our businesses. We’ve been able to source and supply more than 100 million masks to 130 affiliates and to enforce strict health protocols to maintain our sites and premises COVID-free.

As a result, there has been no impact on our production or our ability to supply vital products and energy to our customers. We've also supported our communities with contribution adapted to local situations.

More broadly, safety defined as HSE, including environmental safety, will be well covered in today's presentation as we believe that long-term success is built on sustainability and acceptability. Thank you.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President


Welcome to the traditional September Total Strategy & Outlook session.

First I hope that you are all safe and sound and coping well with the current Covid situation.

To be honest, considering the number of short term challenges and the very high degree of uncertainty that we are facing in these extraordinary times, we asked ourselves whether we should maintain or not this Strategy presentation as it will be difficult to answer any question on the very near future.

But Because our action plans to tackle the present challenges are well into force,

Because we demonstrated our higher resilience since the beginning of the crisis, thanks to the work done in past years to high-grade the portfolio, lower the breakeven, and deleverage the company to strengthen our resilience,

Because Energy is a matter of medium and long term,

In the same way that we announced our Climate Ambition to Get to Net Zero in May at the worst time of the Covid lockdown, we have decided finally to maintain the Strategy Presentation – and this is probably the most important one I have done since 2015.
Today we will elaborate more precisely, looking to the next decade, how we are willing to reach our ambition to get to Net Zero by 2050, how we want to TRANSFORM Total to meet the dual challenge as summarized yesterday by Helle: more energy, less carbon.

Today, you will hear how TOTAL, “Total the oil company” as we are often designated, will become TOTAL EnergieS with a big S, a broad energy company which will be the first oil & gas major to take the commitment that it will reduce by 2030 the Scope 3 emissions of its customers, in absolute value compared to 2015.

Our customers, the demand, that are the key words shaping our strategy. Our strategy derives from demand and energy markets evolution, not supply availability. Yesterday, Helle told you that the Total 2020 Energy Outlook focuses on energy demand, not energy supply. This was intentional. Because changing the world energy mix to meet the climate challenge will in priority require us to change the demand patterns together with our customers, together with society.

Today, we will use concrete examples of successful projects to demonstrate proof of concept that building a multi energy company is possible.

Today, we will explain why becoming a broad energy company is consistent with our long term strategy to invest for profitable growth, with our capital disciplined approach targeting increased cash flows and returns.

Today, we will show you how our oil & gas businesses will fund the transition even at 40 $/b for profitable growth in renewables and electricity while supporting the dividend at same time.

Because the Time is right to accelerate growth into low carbon: the Surge in demand for green energy and climate action is triggering a wave of supportive government policies and attracting new financial partners, and it is creating opportunities to grow in new areas and unconsolidated markets.

Strategically, we recognize sustainability is the key to long-term success

- The Shift in demand-driven low-carbon sales mix underpins Scope 3 neutrality
- Diversifying activities by growing renewable power generation increases resilience and mitigates oil price volatility

Accelerating energy transition and transforming to broad energy company is a matter of leveraging expertise and competitive advantages to selectively capture opportunities and build long-term positions that will enable us to achieve our ambition of moving forward with society and our stakeholders to grow the company sustainably and profitably and get to Net Zero by 2050 or sooner.

The next decade 2020/2030 will be a transformative decade for Total.

- Further high-grading the portfolio, favoring gas over oil, accelerating expansion of low-carbon electricity and decarbonizing the sales mix – all within the framework of strict capital discipline.
The energy transition is an inevitable evolution – cleaner energies will continue to displace traditional energies at an accelerating rate.

- The real risk is not participating in the transition and being left behind.
- We have the knowledge, technology and financial strength needed to thrive in fast-growing areas like renewables, bio-refining and carbon capture.
- We have studied this for years and developed our in-house expertise, we have visibility and we are confident on the returns we can expect in next 5 years from this strategy - so now we go to work, we will execute and deliver.

In 10 years, we will increase energy production and reduce emissions. And so bring our answer to the dual challenge: more energy, less carbon

- We talk the walk, and we walk the talk.

Let’s go for one hour of presentation!

It will be a little long. And to describe you the thematic of the dual challenge, and we will tackle it, increasing energy while decreasing carbon. This presentation is a little different from previous ones. You will have at the beginning, the menu for the next first 10 slides.

So I will announce you the menu with simple slides, maybe some of them will surprise you. And then after I will enter into the menu for each dish, with some details. And at the end, for the dessert, I will come back to you to summarize and speak about returns to shareholders.

So let’s go in the journey that we have prepared. I will speak alone today. It’s mainly due to this virtual, I would say, exercise. It was more complex to us. But honestly, this is the result of hard work of all the teams, that is why all my colleagues are here together with me. I’m the voice, the spoke-person for the whole team and the whole executive committee to describe this strategy.

So of course, and I’ll be short, because you heard Helle yesterday during 1 hour. All this strategy, again, is linked to the evolution of the demand we anticipate. We have seen scenarios. I think there are 2 big trends. Growing population in emerging countries, aiming at higher living standards, so growing energy demand, which we have to face. And the other part of the challenge is absolute necessity to get the planet to carbon neutrality by 2050, if we can, and the latest by 2070 with all the countries being on board.

So these are the 2 challenges. And in front of that, this has some implications like it was presented to you by Helle on the energy mix and on the various sources of energy.

For oil, it’s clear that the acceleration of innovation to substitute oil use is there and that oil demand will plateau 2030 plus and then decline. It will have so an impact on long-term prices, and as you know, Total is considering $50 per barrel.
On natural gas in the scenarios which have been presented to you, clearly, the natural gas is key in the energy transition: available, affordable, complement to renewables with a specific segment of the natural gas, which has the fastest growth, which is the LNG. And natural gas also will have to be decarbonized, greener, with biogas and hydrogen.

The other segment of the energy mix, which will grow quicker is electricity. Clearly, if we want to go to Net Zero policies, electricity will be at the core of the mix coming from 20% of the worldwide energy mix to at least 40% in the Net Zero, the 1.5-degree scenario. And of course, this will have to be decarbonized electricity. And so renewables will be the segment, which will have the highest growth. And last but not least, as it was explained to you, to get to carbon neutrality, carbon sinks are required. So these are the trends, which we take into account.

At the same time, Total as a responsible company, and our aim is to become the responsible energy major, has expressed its clear climate ambitions in May this year, getting to Net Zero. And we clearly share not only at corporate level, but each employee of the company shares the ambition to contribute to get to Net Zero by 2050 together with society for our global business.

And we have established 3 clear objectives and commitments on this road map to get to Net Zero. The first one is, of course, Net Zero on our operations, the emissions of Scope 1 and 2. As you all know, when you speak about 40 billion tons that yesterday Helle was mentioning as the world emission’s, this is the sum of Scope 1 of all corporation and individuals in the planet. Scope 1 are additive. If each company is taking care of the Scope 1, then the planet would be at Net Zero.

But we are also on the top of it, because it’s a requirement from the society. We have not to work only on our emission, but to work with our customers in order to help them to go and to change their demand patterns because if we want to move the planet, we need not only to act on the supply, but we need also, as I said, to act on the demand.

And there, we took 2 commitments regarding, I would say, the emission of our customers. The first one is for Europe. Europe is very important for Total because 60% of our sales and our customers are located in Europe. And so we took the commitment because Europe itself at a political level has decided and has set itself the same target to be carbon-neutral by 2050. There is no reason and no way, in fact, to escape to work together with Europe and to be, ourselves, carbon-neutral in Europe by 2050 or sooner.

And on the worldwide basis, on the question of this Scope 3 emissions of our customer, we set a target in terms of carbon intensity, which is to diminish the carbon intensity of the portfolio of sales by 60% or more by 2050. So in May, we said that.

And of course, today, we will explain you how we translate that ambition, taking into account the evolution of energy markets into our strategy. The strategy is summarized on this chart. In simple words, there is no figures for once in Total. And I think the message there is that, clearly, we want to transform Total into a broad energy company. And this is what we will explain you what it means today more precisely.
It means that we are willing to propose to investors a sort of new concept in energy, a company of energy encompassing natural gas, electricity, oil and carbon sinks. Again, somewhere, we summarized that in sort of a motto: Total becoming Total EnergieS, with a big ‘S’, with, of course, the ultimate objective that sustainability is key to create long-term value for shareholders.

So what does it mean by segment of energy, which is a different approach of the traditional one, but again, we want to cope with the demand. On natural gas, we are a clear leader, #2 in the world. And LNG is one of the fastest-growing segment. So we'll continue to play on that advantage and to maintain and even develop that position, integrating along the value chain while at the same time, we'll develop positions in biogas and clean hydrogen in order to decarbonize the natural gas. We'll also promote natural gas for power and mobility.

Electricity is of course, again, the second fastest segment of the energy mix, on which we want to develop and to accelerate our investments, primarily electricity being produced from renewables. But there again, same strategy to integrate along the electricity value chain, production, storage and trading and supply. Oil will remain a core activity because the demand for oil is still there despite we go to plateau. But there, because of the trends that we expressed, we will focus our investments on low-cost oil, which will be resilient to the volatility of the oil price. And as well, we'll invest in biofuels, which will be a substitute to oil for liquid use of energy. And at the same time, of course, we have to adapt our refining capacity and sales to the demand in Europe where we are a big refiner.

And last but not least, carbon sinks. Because we want to be ourselves carbon-neutral, we'll have to take our share of investing in carbon sinks either nature-based or carbon capture use and storage.

So that’s, in fact, the menu that I propose, and just to complement the menu now, we come with 2 figures. So we want to increase energy. We have some ambition to continue to grow the company, let's be clear. And that means as we are an energy supplier, to grow our energy production. But our growth for the next decade will come from the 2 segments, which offer the fastest growth, which are LNG, as I said, and electricity.

So as you can see on this chart, by the way, because we know you better understand million barrels of oil equivalent per day than terawatt-hour, we translated on the left side. The scale is in million barrels of oil equivalent per day, but it’s a little complex, to be honest, to transform some terawatt hour in million barrels of equivalent per day. I’m not sure, by the way, that our stakeholder would be happy if we continue like that.

So on the right scale, we put another unit, which will help maybe to better understand, which is the petajoule per day. I think our Australian friends love this unit. So maybe we’ll have to take that on board. But more seriously, what we show you is that this company has the ambition to grow from around 3 million barrels of oil equivalent per day today to 4 million by 2030. And the growth will come half from gas, in fact, from LNG, let’s be clear, and the other half will be from electrons and green electrons.
The 120 TWh are equivalent to 500,000 barrels equivalent per day. The oil will remain in our portfolio but will be stable. Maybe it could decline at the horizon of 2030, but the decline will be replaced by biofuels, by productions of another liquid, because again, we’ll need some customers. We’ll need a liquid form of energy in the future.

So that's for the growth. And at the same time, we want to reduce emissions. And today, we are taking new commitments on the Scope 3 emissions of our customers, I should say, of the energy products used by our customers. Because, in fact, it's not really true. It's not the Scope 3 emissions. The Scope 3 emissions of our customers are their Scope 1 in fact. But let’s say it like that. In absolute value, that’s the most important word. Until now, and we are the first major oil and gas company to take a commitment in absolute value on the decrease of the Scope 3 emission of our customers.

Why do we take that? Because first, and I come back to the commitment we took on being carbon-neutral in Europe by 2050. I read the comments about the fact that we are concentrating only on Europe. But again, you will see the positive impact it has on the whole company. Europe again represents 60% of our emissions in 2015. It was the same, by the way, in 2019. The absolute figure did not diminish between '15 and '19, 410 million Scope 3 emissions are reported by Total.

But in Europe, there is clearly an acceleration of the evolution of the demand. And so we commit to reduce the Scope 3 emissions of our European customers by 30% by 2030, which would be a first step to go to 100% by 2050. So we will come back on that.

And these results, I mean this commitment in Europe, of course, contributes to the fact that we can take a second commitment today, which is that on a worldwide basis, our Scope 3 emission in 2030 will be lower than the one in 2015. And again, we are the first to take that commitment. Stakeholders ask us a question after we made our commitments in May, and tell us, “But okay, 2050 is assigned. But what do you do in 2030?” You have the answer today.

So you will ask me, but what do you do? You grow on one side your production but you reduce your emissions. What is the magic tool that you have found? In fact, again, it's just about demand. And what is driving at the end: most of the emissions are not the ones we emit when we produce. When we produce, Total emits 50 million tons of CO2. But the products we sell and our customers, which are using these products, they emit 400 million tons. So the focus will also be there. And in fact, we are able to reduce the Scope 3 emissions because we will adapt our sales pattern to the demand patterns.

What does that mean? That means that in 2019, we sold 55% of oil products, 40% of natural gas and 5% of electrons. By 2030, by adapting, again, our system and our sales to the demand, we will reduce the sales of our oil products to almost 30% and 5% will be replaced by biofuels. So the liquid sales will represent together 35%. Natural gas sales will increase to 50% linked to our growth in LNG. And the electrons, in particular green electrons, will represent 15% of our sales.
So, with these 3 slides you have the framework of the strategy of the company and why we say we are somewhere transforming Total.

Of course, to do that, we'll need to align investments to become that broad energy company we aspire to be. That means that along the years, the next 10 years, the next decade, progressively, because it's a matter to have access to more and more projects, we will increase the capital we spend in renewable electricity. We'll maintain the capital we spend in LNG, more or less 15% to 20% of our Capex. And oil and gas will continue to receive the major part of it because, and that's fundamental to this transformation, we need to continue to deliver cash flows coming from oil and gas in order to be able to finance the growth that we want to deliver in renewables and electricity.

And so you have seen some indication about this increasing capital spend in renewables and electricity. It was $1.5 billion the last 5 years, 10%. It will be more than $2 billion and more than 15% of our capital investments for the next 5 years. And it will progressively grow to more than $3 billion and more than 20% on the next 5 years.

This strategy aims, of course, not only to grow. It's not a matter of volume. It's a matter of value for all of you. We know very well the message. And so at the same time, we will be able to increase cash flows and deliver a double digit profitability, more than 10% of return on equity at $50 per barrel.

I will come back on this slide at the end of my presentation, but just have a look. What do you see? You see that if we take by chance the last 12 months at an average of $51 per barrel, so as we propose to look in 2025 to an environment at $50 with a sensitivity of $60, you can see what renewable electricity in 5 years become, they appear with $1.5 billion. You can see that there is an increase of around 30% of the LNG cash flows. I will come back on that. And you can also see that oil and gas and LNG are offering us upside if price is higher than the $50 base case. And that's, again, the engine. In fact, to be clear, the oil and gas is the engine of transformation because they will give us the blood to be able to accelerate investing in renewables and electricity.

Again, you will tell me, and I affirm the question, why Total? Why do you think you can become this broad energy company? We took the question seriously, and we put there the 8 elements, I would say, which we consider our competitive advantage on which we can build to grow in renewable and electricity. And not to remain only an oil and gas company. You should read them from bottom to the top. They go 2 by 2. All that is well-organized, you know, engineers in Total.

So the first one, I just mentioned it, we have the oil and gas cash flow. We have the financial capacities. The second one, which is important, we are thinking on a worldwide basis. We have a worldwide footprint. When we think about the strategy of renewables and electricity, I will come back on it, we can think of the world, looking for the best opportunities. And from this perspective, we are offering something different from many utilities, which, in fact, are more national, continental or Atlantic.

The second element of competitive advantages is linked to the technical capacities and competencies of
the company. Project management and offshore expertise, it’s clear, that when we look to offshore wind, project management, we speak about 3, 4 projects, in which we invested in Scotland for $4 billion of Capex. And when we want to be pioneer in floating offshore wind, obviously, we have there some in-house expertise that we can use and leverage to be pioneer of this technology.

The third elements are linked, in fact, to our strong position in gas. And in fact, we don’t discover power today. Our teams under the leadership of Philippe and our trading teams have for long looked at gas to power, with some power projects, by the way, like gas-fired power plant. So the integration from gas to power is well-known. And we know we have the expertise of all these markets: oil, gas and electricity through our trading teams, which we have put all together in Geneva since last year to leverage better all the knowledge we have of all these markets.

And last but not least, when we go to downstream to the customers within the DNA of Total, there is a customer proximity through all the activity we get in Marketing & Services. And we have another asset, which is our global brand, our global reach.

Just small information, but we recently acquired a portfolio of customers for gas and power in Spain. We made some polls among the population to ask the question: “which brand should we use?”. 45% of the Spanish who answered to the poll knew Total, having a good image of Total, despite the fact that we left, unfortunately, Spain 10 years ago, when we sold all our shares in CEPSA.

So this brand is an asset and the global reach it represents, and we should build on it. So these elements are, I would say, why we are confident. And not only to speak about the advantage, but to put them into action, in particular the technical competencies. Today, we have launched a project. It's still a project, so it's not yet, of course, I would say, in action, which we call the One Tech Project. The idea is to concentrate all the group’s technical expertise, which is spread today between E&P, Refining and Chemical, Marketing & Services and Gas, Renewables & Power in one large technical center. This will represent in the central organization, more than 3,300 engineers.

Why do we do that? Not at all to make synergies. No, at the contrary, we want to leverage the existing expertise, which is high because the success of Total today is largely due to our technical competencies of our engineers and technicians around the world, but we want to really leverage that in order to give to our renewable and electricity business, that will grow now at a large scale, the, I would say, manufacturing and technical background that it requires if we want seriously to build this broad energy company, and this is our purpose.

If we want to foster innovation, we need to be able to allocate these competencies to these new businesses. And I will tell you, it’s not only the company that wants it, it’s our employees. Our employees today, really, they are all like in the society. They want to contribute to the climate change. They are in an energy company where you have the competencies, and I’ve seen when we propose them to tackle their emissions, they raise 500 ideas, different projects. So they are willing to contribute. Of course, they hear what is happening around us. This is a pressure on Total as an oil and gas company. They don't want to be
in the dinosaur part. They want to be together, in this transformation. And I think what we offer them will be a unique opportunity to contribute directly to the transformation of the company.

So it’s why I’m using transformation today for the first time in my speech. It’s not only a matter of strategy, financials, capital allocation. It’s the whole company that wants to embark in that project globally, and in particular, again, our technical people, which are at the core of what is an industrial company like Total.

So you have the menu, I could stop my presentation there, but we have more slides in order to give you some details. And it’s quite a little long, but I hope you will like the dishes one by one.

I will go through the gas, through the electrons and the liquids. So today, the presentation is not an upstream-downstream. It's a little different. We do it through segments of demand.

So gas is first. And LNG, again, you understood, is at the core of our ambition. Why? Because this market experienced a growth of more than 10% per year in the last 5 years. The first semester, despite the pandemic, it was plus 7%. And I heard yesterday that in August, the Chinese demand has grown by 12%. In the energy transition, there is a strong case for gas replacing coal. And when I heard this last week, President Xi from China announcing carbon neutrality by 2060, I'm sure it's one of the good news for promoting LNG. Of course, renewable will be there as well and hydrogen and EVs in China, but gas will clearly have the lion's share in that mix.

We are very well-positioned. On the top of it, there is not only the demand, but on the supply side, it's true that we face since last year a form of oversupply, which has been accentuated by the pandemic somewhere. But because of the pandemic, there is a lot of projects which are delayed in terms of sanction. This year, no new projects. Last year, all the commentators were afraid to see too many projects by 2025. The reality is that when you delay by 1 year and maybe 2, because I'm not very optimistic about next year and the oil price considering the inventories, if you delay it by 2 years, there is no way to accelerate LNG projects. It takes 4 to 5 years to build. And so that means that there will be a tightened supply by '24, '25, as you can see in this chart, maybe even in '23 even at only 5% growth. And that will benefit to Total. Why? Because we sanctioned projects last year. And so we are in a very good position to benefit from this evolution of the market in LNG.

I will not be long on this one. You know that slide. We are established, we are the #2 worldwide player in an integrated value chain. We are producing in 11 different plants. We have regas terminals. We have long-term customers. So in a global system, it is a matter of size and integration to capture value.

For the next 5 years, we will increase our LNG sales to 50 million tons per year from 35 million. So still an increase. And why? Because primarily, our production will grow by 10 million tons from around 20 to around 30 million. So that's the program.

And again, I will not be long. I will answer the questions that you have. But we have 3 flagship LNG projects, Arctic 2, Nigeria Train 7, Mozambique LNG. They all progressed well despite the pandemic, 38% progress
for Arctic, Mozambique LNG engineering is progressing very well. Its project financing is in place and all the early works are done to welcome the construction.

Just a note, if you add the 3 figures which are at the bottom of this slide, it represents $1.5 billion of cash, which will be generated at the project level in group share. So you will understand why, after that, I will speak to you about growing cash flow from LNG.

And it's not only because we give you today a view not only to '25, but to 2030. What is an important message? In fact, with all the work which has been done in the last years, we have already in our portfolio enough resources to feed the future growth beyond '25 until 2030 by an additional 10 million tons. In fact, we have generated many options in, of course, the Russia giant Arctic resource with our partner, Novatek, which is targeting 70 million tons of LNG by 2030.

In Mozambique, we're beyond the first phase. There is more to come, much more resources, which could be developed in synergies with other operators. We have in the U.S. projects which are expansions of existing plants, which are generally quite profitable like an expansion of Cameron and other new projects we want to develop in Baja, California. And Papua LNG has been delayed because of the pandemic, but it's there and will be developed I'm convinced because of its geographic position. So it's another option, and there could be more to come. So that means that Total will not spend a lot in M&A to acquire LNG resources in the next 10 years. We have what we need in our hand.

Again, I mentioned these figures already. The integration of the LNG marketing and trading teams is creating value from scale and arbitrage. Let's just stay 1 minute on the right-hand side of this chart. As you can see, there is more and more integration. In fact, when we take some market risk, when we market LNG by ourselves, we take it on our balance sheet. We want to do it in an integrated way. We think that being a pure merchant player is clearly exposing us to volatility of the markets, like it is the case today, where you have some commitments to offtake some LNG, but there is no real market to absorb it or at a very low price. And it's much better to come back to the integrated approach, which is that we will market the energy we produce.

As you know, in the past, we have taken some offtake commitments from the U.S. LNG. But in the meantime, we are developing positions. And so you can see that this white part at the top of the column is diminishing, and that will be the trend clearly to exit from a pure merchant risk, but to take the risk if we have also the profits coming from the production and the infrastructure, I would say, the LNG plant.

I would say that we have a good integration, you've seen this chart last year, but it's useful to us to express what it means. It means that when we are developing a customer portfolio in Europe, either through gas-fired power plant or through customers, B2C and B2B customers, we are having a short, I would say, of LNG. It represents 11 million tons of short.

And these 11 million tons, we have the infrastructure to fill back. It's owned by us, the regas capacities. We have 20 so we can manage them, and we have also the portfolio in Europe which represents around
20%, 25% of our sales. And Europe is key because it's a very liquid market. It's very accessible. You've seen
that it's a market of last resort. We observed it last year when the prices of LNG were low. Everybody is
coming to Europe. It's better to be able to control your infrastructure. And by the way, we are quite happy
to see our regas capacity building full and making money in this type. So it was, again, the advantage of
integration.

So that's in terms of cash flows that you can expect from our integrated LNG business. We put there the
2019 figure at $64. So you can compare to what we'll be able to deliver in 2025. Again, the production will
increase by 40%, the LNG production, from 500 something to 800 [kboe/d] on this period with the projects
which have been all launched.

And you can observe that, in fact, we'll be able to deliver same cash flow at $40 per barrel, than last year
at $64. You have 70% more or less of the LNG portfolio, which is linked to the oil price. It's why you have
clearly an upside. And at $60, it represents between $1.5 billion to $2 billion extra cash flows. You have
the same assumptions of NBP and JKM to be able to compare and to have the sensitivity to the Brent price.

So I've been long on gas, but I cannot stop there on gas without speaking about methane, because we
have to be consistent with the climate ambition. And the methane, when we speak about gas is, in fact,
lowering our Scope 1 and 2.

And there, there are 2 information. The first one is on the right. When we look to our operated gas assets,
I can say today that we are almost near 0 emissions because methane intensity of our operating gas asset
is lower than 0.1%. I don't know if we can measure it lower than it. But it means that, honestly, we are at
the top of the class. We continue to drive it and surely not to get it coming back higher, but we are there
in a strong position.

The methane emission of Total as a whole are coming more, in fact, from the oil business than from gas
business. Globally speaking, if we take oil and gas the average intensity is around 0.2%. We'll look to drive
down because, as you see on the left, we have a program, and we are investing to continuously reduce
our methane emissions. We've done 45% of reductions in the last 10 years. And we'll continue to drive
down, in particular, by limiting the flaring or eliminating some cold vents on some mature oil fields. So
there is a program on methane emissions, and really there, I think we are participants to many initiatives,
and to be transparent on that, it's very important when we want to be a leader of natural gas.

The other way to be consistent with our climate ambition is not only to invest in natural gas, but also in
biomethanes and clean hydrogen, because these are the ways to decarbonize natural gas.

On these 2 businesses, it's quite new to Total. 2020 is an important year because we have established 2
business units, recruiting people outside of the company to bring expertise, one for biogas and the other
one for clean hydrogen. I mean for hydrogen. Clean means that we are color blind in Total. Even if I will
tell you, that green hydrogen when you are investing a lot in renewables is, of course, quite attractive.
On biomethane, at this stage, we set the first target. Probably we will increase it in the coming years when we'll have a better understanding of all businesses. But we set a target: about 10% of the gas we supply to our CCGTs in Europe should be biomethane. It's a way to decarbonize our Scope 1 emissions. This would represent around 5 TWh per year.

On the green hydrogen side, there are many interests in the company. It's, for the marketing, a way to decarbonize the road transportation, the trucks, buses, trains, private fleets. So we are looking to that business, where we have today, some small positions. I will come back.

We are also looking to produce hydrogen. We will have a sort of project showcase in La Mède biorefinery, where we want to establish an industrial project with 100 MW solar plant, feeding a 30 MWelectrolyzer. We are working on it, and we'll come back on it when we'll have clear ideas.

In the next 5 years, our plan is to have one green hydrogen project in our hands to better understand it. But a real one with intermittencies, storage issues and with real customers, and a blue one, which means decarbonizing by capturing the CO2 from SMR and sending the CO2 in depleted fields. For this one, we are looking in the Netherlands. So that's for gas.

Now my second dish is electrons. This is a new one. You will hear a lot of electrons, much more than you will ever hear within Total. You have seen the news coming month after month since the beginning of the year. We have been quite active and in fact, it's just that we receive the fruits of what we grew for the last 2, 3, 4 years, in 2020.

And because of that, we have a better visibility, better understanding, we have figures, we have models, which we can add and tell you today what we can deliver, not only in terms of capacity, production, but also in terms of results and cash flow like for the other businesses. And I think as soon as we told you we will spend more in that business, of course, we need to be clear about the value creation.

So we can do it today. We'll do it. And you noticed what I already said. Our development in electricity will be along the full value chain from production to customers, through trading and storage. This is why we develop customers as well.

You have here some figures, and I will make one comment. You see that by 2025, we expect to have 9 million customers in France. Today, in France, Belgium and Spain, we have around 6 million customers. So we want to grow in these businesses. We will produce, if you add the production, the net production coming from our gas-fired power plant and from renewables, around 50 terawatt-hour net, the difference being supplied in France by some power coming from the nuclear system at which we are eligible when you are a new competitor in the system in France.

But I will add another comment. And just to educate you the way we'll speak about electricity. You will hear us speaking about gross capacity and about net production. Why this choice? It's not to grow the figures like I read in the newspaper, not at all. It's just gross capacity is a good metrics for understanding
the development phase and the Capex that we need to finance, if we want to build these plants, because we are ready to build and develop the plants at a 100% basis in Total. So that means a lot when you look to the development phase.

Having said that, gross capacity is not the right metric to speak about profit and loss, to speak about revenues, to think about cash flows. Why? Because like in E&P, when I am announcing that we sanctioned Mero 3, we speak about a project of 180,000 barrels per day, I think. It's 100% gross capacity. And then we have our own production. It will be 30,000 barrels per day net.

So there, again, we make the difference, and we speak about net production, which is the basis of all the P&L, cash flows and revenues and which is another phase of the project. One, it has been invested and derisked. It is true and in our business model, and I will come back on the business model, we intend to sell 50% of what we have invested to cash in part of the value immediately, to de-risk also the project, and then we'll have in our net production 50% of what we have developed. So we will continue to speak about gross capacity and net production.

Last word. In electricity, capacity doesn't mean a lot of things. In E&P, in my example, when we speak about 180,000, there is a good chance, but E&P will produce 95%, I would say, of the capacity.

In electricity, when you speak about capacity, it means nothing, because your solar plant will be around 20%. Your wind onshore at 30%, your wind offshore at 50%, and your gas-fired power plant, you don't know. It could be from 20% to 60%, depending on the weather or the other, because it's not a base load. So that means, again, I'm advocating that this gross capacity is the right metrics in order to better evaluate the investment phase and net production for the P&L.

So yes, I've been long, but I wanted to clarify that today.

So the business model I just mentioned, and I have often the question that all that is not profitable. It's profitable. It's maybe not delivering the same upside when we invest in the oil business because as you've seen in the previous slides, when you are in the oil business, you have the upside when the price is going up. You have also the downside when the price is going down, which means your business model is less stable, but it delivers profitability at the end.

And this is why we say we have a capital-light model. And the way we envisage our development in that business I reiterate to you is a typical project IRR will be around 5%. But there is a lot of attractiveness from the financial world. And why is there a lot of attractiveness from the financial world to finance these projects? Because this is the other part of the slide. These projects are offering predictable cash flows with long-term upside. And the predictability of the cash flow because of the PPA either granted by state or corporate PPAs are attractive enough to financial institutions to be able to bring money. So we can leverage easily without being ourselves, I would say, a green company. But it's easy for Total to leverage our robust balance sheet to finance this project with the same competitiveness, even better sometimes than our competitors. So we put typically 70-30, but yesterday, we approved the project in Japan. It was
That's why at the end, in terms of equity we have to inject, we can leverage it. It's consistent with the Capex we have announced. And then we will farm down 50%.

Why do we consider that farm-down is important? It's not only a matter of accounting. It's more fundamental to that. You are signing PPAs with third party, state or corporations for 10, 15 years. You never know what can happen. I'm afraid some state, even European state, could sometimes envisage to revisit their contracts. Farming down is a way to cash in immediately part of future revenues while de-risking 50% of the project. I think, honestly, this is the same type of business models that we applied in our oil and gas business. We are never 100%. We share the risks because of the magnitude of it. But when you look to offshore wind projects, frankly, to be 100%, it would be quite brave. So there is risk at the end. The target permanently to us is to have more than 10% return.

The project in Japan, that we looked at yesterday was far above 10%, more in the 20% plus, to be honest. I can confirm to you that all the projects which have been announced by Total since the beginning of the year have reached that threshold of at minimum 10%, and some of them are above, thanks to that mechanics.

The other advantage is why we see some value to invest in renewables. It's strengthening our group business model, because it's balancing the cash flow risk profile by giving predictable cash flows. And it has some long-term upside. Because beyond this first period of PPA, there are some upsides.

Solar panels are there for 30 years, it's not for 15. And even if you have to change something, most of the investment has been done, including access to the land. In the wind farm, you can change the turbines for more powerful turbines and get more energy from your same location. So there is a life beyond the PPA.

And this tails value. Of course, we are entering into merchant markets with volatility, and the renewables will increase volatility in this electricity market, that's clear, but it's offering to our successors in 15 years new cash flows with investments being largely done. The second upside will be to be able to produce green hydrogen from these renewable plants because you can have easy access to marginal 0 cost electricity and then store your energy. So it's a way to enhance the production capacity from your renewable investment.

And last but not least, trading, aggregation. The more you have decentralized sources of energy, there is clearly added value to be able to aggregate all that and to deliver it to the grid. And that's a competence on which we are building in the company, and we will develop on that value.

I was long there, but I think it's important to explain you why we consider that these investments in renewables and power is not only a matter of being responsible in terms of climate, it's also fundamentally to create value for the long-term for our shareholders.

I did not mention it just for fun. I think you read it on the first slide that the capacity we are targeting by
2025 is no more 25 gigawatts, but 35 gigawatts. I know that people were asking them. Where is it coming from, the 25 gigawatts for 2025? The reality is that the activity of our teams has been great since last 2 years. And today, when we look to what we have in our portfolio, we have already this 24, 25 gigawatts, 24 rather than 25, but let’s say, we have them. We have 5 gigawatts, maybe 6, by the way, in operations. We have 4 or 5 gigawatts in construction, and we have built a pipeline, 5 gigawatts being announced in solar in Spain, in France and in other countries.

We know that in the renewable business for this type of solar and onshore wind, the duration of the project is 2 years, 2.5 years. So we can still increase our ambition by 2025, but we will continue to work in '21.

And these projects, '21 to mid '22 will feed renewable capacity by 2025, which is why we have raised the bar to 35 gigawatts in 2025, building again on the 2020 dynamic where we have been not only able to capture opportunities but at a low entry cost, and that’s a tribute to the teams.

So I speak about production, because at the end, as I will show you figures of P&L, what is important is production, so 50 terawatts hours by 2025 of productions, 40% from gas-fired power plant, 60% from renewables. And 2040, clearly, priority will be given to the growth in renewables more than gas-fired power plants, because in Europe, we see a limitation to that. And the target is to reach the equivalent of 500,000 barrels per day, so 120 terawatts hour per year. At this level, clearly, we will be among the top leaders in renewables. But the ambition of Total, we are among the top 5 in oil and gas, is to reach the same level in renewables. And that means that we'll have to have the engine to continue to feed our future growth by adding 10 gigawatts per year of new projects, of gross capacity.

This is an important slide, just to show you that what we are building today is quite a unique renewable portfolio because we’ll have at the end for various vehicles a full worldwide footprint, representing again these 35 gigawatts. Europe will have the lion's share. But we'll be also quite strong, quite big in India, around 6 gigawatts. And China and the U.S. are also areas where we intend to develop, as well as South America. By the way, when you look to this map, it's not exactly the same map that we have in oil and gas. This business is rebalancing somewhere the group geopolitical profile. But again, I said to you, we have one competitive advantage, it's to think on a worldwide basis and to look to various opportunities. This is what you can see.

Strangely, Africa is not well-represented. It will be our next challenge. But I think it's because today, our renewable teams are going where it's easier to have access to capacities. But I think with the One Tech story, I’m convinced that all the people who know very well Africa in the company will be able to accelerate that development in that continent.

I will not be long there because Philippe will come back in a zoom on offshore wind. Just to tell you, I mentioned it, that, we have decided to be pioneer in floating offshore wind. We are not late. On fixed bottom offshore, we are late compared to some competitors, even if we acquired some interest in very large projects. We think that there is a huge potential for offshore wind, but this technology will still benefit
from strong policy support in coming years, and we want really to be at the forefront of this technology.

So these are the figures that I promised to you, not only figures, a little more than that. You have even some curves for the ones who want to try to measure what is behind. The important figures that will deliver this net production of 50 terawatt-hour by 2025. We'll deliver a result of $1 billion, cash flow of more than $1.5 billion and capital employed of $15 billion. People will make the math, we say it's a ROACE of 7%. But the clear part of that is unemployed capital, un-producing capital employed because we are in a growing mode. So we'll continue to feed capital, which are not all producing during this period of building this business.

Let's come to the third dish, which is a liquid, not to drink, to be sure, water is fine. But there, the motto is value over volume. Clearly, again, remember what Helle explained you about the trends in the market.

And a word about the market, having said that. And you have seen that all the presentation is done at $50 and $60 per barrel. When we announced recently our price deck for making our impairment test, we gave a price deck, which in the coming years is low, at $35 today, but it will grow gradually.

Why? I will not speak about OPEC, demand, et caetera. Today, I'm speaking about investments. Oil companies have lower investments. $300 billion will be invested in 2020 in upstream. I suspect that 2021 will not be much higher because everybody will be cautious about it. Only 250,000 barrels per day have been sanctioned, almost nothing. One of the projects by the way is in the Total portfolio, it's Mero 3 and maybe a second one with Uganda will be there. So we continue to work.

And on the top of it, not only lack of investment, but also shale oil dynamic we observed in the U.S. in the last 3 years, which, of course, has somewhere overcome the deficit of investments. There is less enthusiasm. Clearly, the financial investors, not only this year, but with last year, are asking themselves questions. So we think that the dynamic there, even if our U.S. friends are always surprising. It's much more uncertain than it was last year. And the lessons drawn by the fact that U.S. shale oil has been among the first production to be curtailed voluntarily. I think, it's a strong signal. So our vision is that there will be reduced supply, not enough investments to compensate the natural decline, which is supportive for oil price medium-term rebound. I cannot tell you now, but by 2025, we'll be very surprised if we don't see $50, even $60 per barrel.

But remember, by the way, that today, we are sad but we were at $72 in 2018. We are all well-paid to know that volatility means really something in the downside and the upside in the oil market.

So for Total, as I said, value over volume. It's a matter, fundamentally, of adapting our value chain in the oil business to demand, and in particular, in Europe. We said we are integrated between production of liquids, because we have oil and condensate in that figure, of course, which are liquids, refining capacity and oil product sales.

What you can see in 2019, because we have, in the last 10 years, begun to diminish, to adapt our refining
capacity to the demand in Europe. There is a disconnect between our sales and our refining capacity. But it's not only a matter of integration, and we will continue to drive down this refining capacity. By the way, we have done the work in the last 3 months for 2025 because we have announced the divestment of the Lindsey refinery and the transformation of the Grandpuits platform in a 0 oil platform with a unit of biofuels, to produce more biofuels.

So that's the trends. And on the demand on the sales, we'll increase biofuels and we will have again to adapt ourselves to the demand, in particular, in Europe where we are a very large retailer. So that's the business trends.

On the production side, let's say that we have built our position. And we are the leader in terms of low-cost producer among the majors, at $5 per barrel, and we confirm that we'll maintain that level. I'm sure Arnaud and his team will do better, but $5 is already quite low. And so that's something which is embedded in our strategy for 5 years, to look for low-cost oil. This has helped a lot to diminish the group cash breakeven with the help as well of our downstream businesses in refining and marketing. But we are a low-cost oil producer, and we intend to build on that advantage.

Why are we in such situation? I would just insist today a few minutes on the fact that we have a strong asset in our portfolio. It's our strong presence in the Middle East and North Africa. Because when you say my strategy is to focus on low-cost oil, where do you find it? To be honest, you find it in Middle East and North Africa.

And recently, we have continued to build that portfolio, accessing to the Abu Dhabi concession, accessing to Al Shaheen, accessing to Berkine Basin in Algeria. So consistently, we have built this portfolio, which represents 40% of the Group’s resources, it's the history in Total. This represents 650,000 barrels per day of production, oil and gas, but the oil 450,000, which is 1/3 of the oil production of Total. The average cost of production is $3.50 per barrel.

So this oil will be produced for long, for sure. And the profitability is good. I know that people say that in the Middle East, fiscal terms are tough. But at $35 per barrel, this year, we are quite happy to have these productions, which are giving us, because there is less sensitivity, a ROACE of 10% at $35 per barrel. I'm not sure there are many oil and gas assets which can deliver such a profitability this year.

And so this is a position we intend to continue to build. And if we have opportunities to grow in that region, Total will look carefully. It's a priority.

Another region, just to fight the idea that deepwater is permanently high-cost business. When you look to the giant fields we are developing in Brazil, this can be qualified, because they are giant of low-cost opportunities. And we have built material positions in the last 5 years there, with the Mero development, which will produce almost 700,000 barrels per day with the Iara development, which has the potential to increase, and with the operatorship of Lapa.
We have in our hand, it seems, according to my explorers, a unique high-profile exploration license that we intend to drill soon. Brazil is not only a matter of low-cost oil offshore. It's a growing market onshore for Marketing & Services division, for biofuel. So Brazil is for Total an important country, large population, large markets, on which we intend to continue to grow. By the way, it's also a land of opportunity for renewables and power and for LNG. So Brazil is one of these countries, which will be the focus of the strategy for the next 10 years.

I was speaking about exploration. People are asking us where do you go with your exploration and your climate ambition? How do you make all that consistent? I think it's clear that exploration will have also a challenge of transformation. Not to stop exploring, please understand me, but to explore things, objects, prospects, which are in line with what we expressed, which is low-cost oil in terms of development, not in terms of drilling.

And that's something on which I know that Kevin McLachlan is working hard with his teams. Today, our portfolio is not really on this trend. It's long to build a portfolio trend, but I can tell you that the new licenses that we will acquire, the executive committee will be very clear about the fact that we want to dedicate up to $1 billion. We capped the budget, but with $1 billion, you can find oil on these targets which fit with our strategy.

I'm happy to say that today, we have a clear positive dynamic in exploration, and I pay tribute to the team, so explorers, in particular, with the Block 58 in Suriname where we entered last year. The 3 first wells have been 3 successes. A fourth one is coming, and there is more to come in 2021. We have a number of prospects. We will have to appraise all that. It's light oil for the time being with gas.

But honestly, the challenge we have given to us as we become operator very soon of Suriname is to do as we have done in Angola. In Angola, we discovered in 1996, it was into production in 2002, Girassol. And it's possible that this Block 58 could be a golden block as Angola. The challenge will be to put into production Suriname by 2025, even if it's a short and quick development. So that's somewhere in which we work and which will fill the future growth. Again, if it's giant, it will fit with the strategy.

Just to finalize on oil, because it's a core activity for Total, don't misunderstand my message today, we have a portfolio of projects, which have been sanctioned in '19, which we'll have sanctioned this year, and which will come tomorrow: Brazil, Gulf of Mexico, Nigeria, Angola, and one of them being Uganda.

As you noticed, we have been quite active to act countercyclically. We made a deal with Tullow, which was this year better than the one we stopped last year. So we were right to stop and to relaunch. We have benefited from a good hearing from the Uganda and Tanzania authorities, maybe because also the economic conditions are lower. So we are working on this one. The tenders are expecting this month. And we hope we'll be able to sanction the project before year-end.

All these projects, of course, when we sanctioned them, we review systematically the CO2 production and the way to design the projects to minimize the emissions. Because part of the climate ambition is to ensure
that our investment in oil projects are consistent with our climate ambition. And in particular, we look carefully to the carbon intensity of the project, but also of the returns. You can see that the portfolio of projects we have, all the projects have a return of more than 15% at $50. And the average technical cost, OpEx plus amortization, is around $16. So again, in line with the strategy.

When we speak about oil production, we must speak about Scope 1 and 2, because it's like on gas, I spoke about methane, we need to diminish our emissions. We set a target beginning of 2019, of lowering our emissions down under 40 million tons, despite the fact that there is an increase of activity, by 2025.

We are working on not only on that, and I confirm that we'll reach this 2025 figures. And we will maybe revise it, but we need to work.

What we have done this year is to mobilize all the teams. And recently, we took the opportunity of the 5-year business plan to ask them to come with projects to reduce. They proposed too many initiatives. I would say, 500 emission-reduction initiatives. Some of them were at $1 per ton of CO2, some were at $200 or $300 per ton. There was a whole spectrum, we didn't take everything, to be honest. We put in our 5-year business plan all the initiatives that were under $40 per ton, because it's a metrics we have selected.

The others are not forgotten. We will have to work for them to continue to relentlessly lower our CO2 emissions. But I was very pleased, to be honest, with the results, since we have asked all our engineers and technicians to engage themselves. They have many ideas. We can cross-fertilize because some ideas which came around from one subsidiary could be used in another one. So there is a great potential to lower the Scope 1 and 2 emission. And I'm confident we'll reach the Net Zero by 2050 or sooner even.

The other activity we have is around carbon sinks where we have established 2 teams, one working on natural-based solution, the other one on carbon capture and storage. You've noticed that we entered the Northern Lights project. We'll not spend time today, but in February, I promise you that we'll come back on this Scope 1 and 2 emissions, the way to reduce them, the way to offset them by carbon sinks. And our colleagues will have the opportunity to make you some presentations, but we took the choice today not to be too long because of this virtual exercise.

And last but not least, it's like in gas when we speak about methane emission, when we speak about biogas, hydrogen. On oil, we speak about Scope 1 and 2, how to reduce emission. And we speak about the biofuels because it's a way to decarbonize oil. And Bernard will make you an extensive Zoom on our ambition in renewable diesel. I will not be long there.

Just to tell you that first, we had a first good experience in La Mède. It's profitable, $350 per ton in La Mède of cash flow from operations. It's a profitable business, first. Second, the refiners have one advantage: they can easily convert refineries into biorefineries, so it lowers the Capex. We have there clearly a role to play, and Bernard will explain to you that the ambition is to be among the top renewable diesel producer, reaching a minimum 2 million tons by 2025, if not 3 million and 5 million by 2030.
So it's finished for the part of the menu, which was “increasing energy”, in gas, electrons and liquids.

Now I'm going on the reducing part, which is reducing emissions, and more importantly, adapting the energy sales to the market evolution, which is what I will focus on now with a few slides in order to give you more details.

So first, that means that fundamentally, when we said that we are willing to be carbon-neutral together with society, people say, “Oh, it's a way not to do it”. No, it's not at all the case. What we intend to do is to actively shape the demand by working with our customers, by pushing them to shift their sales to gas and electricity or biofuels in power generation, in mobility and heating.

In power generation, we took the decision not to sell any more fuel oil to power generators from 2025. We don't want to lose the customer, so we'll have to work with them, to adapt their system and to convince them that they can produce electricity with better tools and in economic ways. We can develop storage solutions.

There is a revolution of mobility on which I will come back and heating as well. There is there some business to be done with our customers. It's a real engagement of the company and the people, the teams in face of customers. Our customers themselves, most of them, have the same ambition to go to carbon neutrality. So we meet together. We are in the same boat to work in the same direction, bringing our expertise in energy sources and their own expertise of their businesses.

I will focus on mobility and revolution of mobility going from oil, gasoline and diesel to other ways to run cars, planes, boats. In biofuels it's not only a matter of producing. And Alexis will come back on it.

We want also to grow our sales of biofuels in Europe, of course, where we are already the largest biofuel retailer, but also in the rest of the world. I mentioned Brazil. And biofuel should represent 10% to 15% of our fuel sales by 2030.

Gases for mobility is another axis of development. LNG for bunker fuel, we have been active. We are not only active. We have contracts. Now we have some bunkering barges in the North Sea, which had been launched this month, I think. We have also natural gas for transportation. We have a position in the U.S. for clean energy, where we are a shareholder, but also we developed positions, in particular in Europe.

In Europe, we think NGV, natural gas for vehicles, should be mixed with biomethane. We think that's a market that will evolve quickly to bio NGV rather than just NGV. When we think to develop our position in India, where we are developing with Adani in the city gas, there is there a good opportunity to develop, and there is a policy by the government to develop CNG. In India, the network we intend to build will be around CNG stations.

Last but not least, in hydrogen, we have few positions, in particular in Germany. We are part of the H2 mobility ventures. There, we need to accelerate, and it's part of this new economy of hydrogen that Europe
wants to establish. Total will be one of the players of this hydrogen economy.

And last shot, but I will not be long because there, you will have a Zoom on electric mobility by Alexis and Philippe, the idea is fundamentally to take advantage of this emergence of this new business, huge growth by two ways. The first way is to produce, to manufacture batteries together with PSA and we have expertise of Saft. The other way is to establish ourselves as a leader on EV charging segments. You have probably noticed that we have some successes in large European cities, Amsterdam, Brussels, London now where we have acquired half of the existing charging points in the city of London.

Again, I'll let Alexis developing that chart later.

All these evolutions on the demand will translate into the ambition of Scope 1 and 2 and 3. This is the one announced in May about lowering our carbon intensity of the energy products. I would just like to remind a comment on it. When Total sells jet fuel to an airline company, the airline company is using the jet fuel to make a flight on 1,000 kilometers journey. It will emit 22 tons of CO2. This 22 tons of CO2 are Scope 1 of the airline company. They are also reported in the Scope 3 of Total and the Scope 3 also of the plane manufacturer, in the Scope 3 of the engine manufacturer.

I know that for many people, oil and gas companies are sole responsible for all Scope 3 emissions in the world. It's not the reality. And more importantly is that the chart for me is the symbol that if we want to tackle the aviation, energy demand and challenge, it will have to be done together. We have to make coalitions. Each company, which is on this chart, will have to bring its expertise to find solutions and the leaders will be each of these companies in those segments.

So today, on the top of the May commitment, we have added what I have announced at the beginning of the presentation, the fact that the evolution of the sales pattern I just described by adapting our refining and oil product sales. More natural gas, more electricity will be translated into commitments, one for Europe, minus 30% by 2030 on our way to Net Zero by 2050, and worldwide 2030 lower than 2050.

I have finished all the dishes. Now I go to the dessert, which is the last part to speak about. We have some insights. Let's see what our strategy gives at the end of the day in terms of results.

With 2 words, which are, for me, and for the Board, by the way, by one of the Board members: he said, finally, it's a matter of resilience and a matter of growth and to be able to combine both resilience and growth in developing Total and convincing investors.

You know the fundamentals, the resilience is based on these 4 pillars. HSE, delivery, cost and cash that we repeat. It's well into action in the company. The cash breakeven is under $25 per barrel in 2020. We intend to remain at that level. So that's the basics when you are in a commodity business.

We have to keep the discipline, in particular, on capital investments. We spent a lot of time to review our 5-year business plan to know what can we make. On one side, we need to give the space and enough
capital expenditures to grow this renewable and electricity business. On the other side, as I said, we want to grow the LNG business and to maintain our core activity, which will give the future cash flows.

We came to the conclusion that we can do it in 2022-25, I will explain you why I make an exception on ’21, at $13-16 billions, depending on the oil price at $50-60. There is some flexibility, one of the lessons of this year is that it's dangerous to give a very precise figure. We have to be flexible and to keep some flexibility in the way we monitor our Capex like Arnaud and his teams are doing on the short-cycle projects. We need to keep that in mind and not overcommit ourselves.

We have introduced a floor of $2 billion, as I said, for renewables and electricity. We will spend the $2 billion per year minimum from 2021. In fact, it's exactly the amount we'll spend in 2020. I'm not sure, maybe a little more. We'll see, but we are in that range.

With $13-16 billion, we can develop the program I have presented to you. 2021 is a different approach. We don't want to launch a budget at $14 billion and then ask our teams in March to diminish it. You know it's quite a burden for all our teams, what we have done this year to resize all the budgets around the world. We prefer to start at a level which is cautious. It's coming from the top. Let's spend $12 billion. It's mainly organic cash flows, because we also know that it's not a very good time to sell assets. We don't want to lose value. So we'll start and build our budget on around $12 billion.

We'll see after the end of this exercise. We'll come back to you in February. But of course, if there was a quicker recovery, we'll be able to activate some of the short-cycle projects which are in the end Arnaud and his teams, which we put for the time being on the back burner.

We think about Capex, then OpEx, cost reduction. It’s clear that this year, we have accelerated, I would say, our saving programs. We announced in February $300 million. In April, we told you, $1 billion, we increased it. But I can confirm to you that we are on the track to deliver the $1 billion of savings in 2020. Mobilization is very strong in the company. And we have decided to raise the bar there also and to raise it by another $1 billion by 2023. Of course, it's more and more complex because the company is, I would say, well-managed. To be honest with you, if you would ask me if I can lay off 5,000 people, I don't know where I would find them. There is no way in Total. I'm still convinced that the best way to mobilize our teams to deliver the $1 billion is not to frighten them by speaking about layoff. We told them to concentrate on delivering from their assets and delivering the cost savings, and the company will be there. It's a matter of mutual support, let's mobilize ourselves. We have the way to weather the storm. I think this is a strong message in the company. And again, yes, there might be room to streamline headquarters, 10% maybe somewhere but not more.

Today, priority is to continue to optimize operations with digital. We have launched, last year, and we presented to you back in February, some digital initiatives. We didn't cut anything there. We continue full speed to deliver this $1.5 billion value, which was promised by the teams. We have taken some immediate decision to freeze the recruitment, which is a way to save some cash. Of course, it cannot be long term. But again, my message there is that we will deliver the $1 billion and the extra $1 billion by 2023.
Coming to the end of the presentation, just to wrap up, the upstream production is key because most of the cash flow is coming from this production. So, over 2019-2025, we propose you a figure, which is a little wrong. On average, it will grow by 2% per year. In fact, like we told you last year, there is a sort of plateau between 2019 and 2022, and the start of the ramp-up will go from 2023. In fact, '23, '24, '25.

So this 2% per year, which make more or less 10% to 12%, should be spread more over 3 years than over the 5 or 6 years. It's lower than last year because last year we were thinking to acquire Algeria and Ghana assets from Anadarko. We took the decision not to do it because it was part of the savings we had to do. So, we have lowered our ambition by 2025. But we have also, as we described, a portfolio of opportunities, which will allow us to grow our cash flows.

The quota impact has to be noticed as well. This is why I'm prudent on the coming years. This year probably, we'll end up by around 2.9 million barrels of oil per day because, and it’s good news, the OPEC countries and non-OPEC countries are really implementing the quota. It's good because it's supporting the price.

The growth will mainly come from LNG, as I told you already, and the growth is also helped by the fact that we have quite a low decline in our portfolio because of 50% of production in long plateau. This results in growing cash flows, which are the blood of the company. Last year, we told you we'll have $1 billion per year of extra cash flow. This year, we're somewhere about $5 billion because there, again, it's difficult to speak of per year because next year, we propose you at $40, so it's not linear.

But when we took the last 12 months, the average is $51 per barrel. In 2025, at $50, when we compare the cash flow generated, the growth will be $5 billion. This is the amount of additional cash flows. But it will be different, it's not the same $5 billion than last year because we have less production on the Upstream part but we have more electrons, and the electrons and the electricity business will deliver $1.5 billion. So we are back to the $5 billion, but not in the same way. We demonstrate, by the way, that this idea to drive the strategy to become a broad energy company is delivering same type of results in terms of additional cash flows.

You can see the sensitivity. Another comment on this chart, $40 per barrel. Why did we mention it there? That should give you an indication on which basis we say that the Board confirmed that we support the dividend at $40 per barrel. You can see that, if we are able to weather the storm at $40 per barrel, we will also benefit in the future years of the growth we are expecting from our businesses.

This leads to this chart that you know very well. The cash flow allocation for Total did not change in order of priority. The first priority is capital investment. We have adapted it to the strategy. We just said $13-16 billion, over 2022-25, more than $2 billion of renewables and power. The second priority is supporting the dividend at $40 per barrel. And I confirm you that after having done the 5-year business plan, the Board spent some time to look at various scenarios and confirmed this support.
In these difficult times, it's not easy to speak on the medium and long term. It would be premature to speak about growth. But the next priority will be on the balance sheet. And we also have always said, today, our gearing is growing up. It was under 20%. We'll be probably around 23% by the end of the year, I think, which is acceptable.

But if we have additional cash flows, we will dedicate them after capital investments to deleveraging the company and going back under 20%. This will be the next priority. And if we have more, we'll have time to discuss share buyback, dividend increase, but let me be clear, priority is today investing in the company according to the strategy, supporting the dividend at $40 and gearing under 20%.

I know that for shareholders today, it's not only a matter of dividends and returns, cash returns. It's also a matter of ESG, and a lot of you, investors, attach importance to these ESG commitments. A corporation like Total has to be a responsible company in all its dimensions and to bring to society, not only benefits and profits, but more than that. I would first notice that Total has been, this week, designated by the UN Global Compact as a lead company.

In fact, we have been a lead company for the last 3 years, which is a good recognition of the efforts we do in that field. Of course, my whole presentation was about climate change environment. So the “E” of the ESG, I covered it extensively during one hour. Net Zero. We are publishing today our new climate report, the annual climate report. We have published yesterday our new and updated biodiversity policy because this is the other big challenge for the planet. So, we are covering as much as we can the “E” of the ESG part.

So social is as much as important. I mentioned to you that we will go through this crisis with no big layoff. Solidarity, mutual support is the real value of the company. I think it's a demonstration of our social engagement. Safety was explained to you, presented to you by Arnaud. I would say a word about diversity. Gender equality in Total is a reality in terms of salary and pay, for sure. In terms of responsibility, we can progress. We have progressed, but we can progress more for international managers, for women as well. So that's a focus of the group on which we have set some objectives as a management.

And the “G”, the governance. I would first remind you that last year the Board has submitted to the general assembly of shareholders, and it was voted, new bylaws which give new duties to the Board, now in written, but it was done already, to oversee social and environmental stakes. The Board is very interested in understanding the condition in which all these social and environmental stakes are taken into account in the projects we submit for approval.

In terms of governance, I am Chairman and CEO, like traditionally in the French companies, but we have a lead independent director, which is quite engaged. It was Patricia Barbizet, now it's Marie-Christine Coisne-Roquette. She's directly engaged with shareholders and she will have some roadshows herself, independently of the Chairman and CEO, and she will report to the Board and it's very lively.

And last but not least, about governance, my compensation is linked, not only to climate, also to ESG
indicators. So, I think this ESG approach is well embedded in the model and the governance of the company.

So about the last slide, coming to the end. Again, summarizing the compelling investment case, that is Total. What we offer to you today is on one side, to transform Total into a broad energy company, which will really take onboard the commitments on getting to carbon neutrality with a strong commitment on Scope 3 absolute targets. We will grow, but at the same time, we'll be able to tackle the dual challenge. Growing on one side, profitably, while decreasing emissions. More energy and less carbon.

And you have noticed this will come from LNG and renewables. And of course, at the same time, we are offering that strategy to this concept of a profitable broad energy company, and we offer to investors a high yield dividend. We intend to support it as much as we can. And so, I think, and the Board is convinced, what we call Total energieS with a big “S” is a real compelling investment case, which should support stock re-rating.

Thank you for your attention, and I propose that we'll go to the Q&A.

QUESTIONS AND ANSWERS

Operator
Thank you. Ladies and gentlemen, the first question comes from the line of Jon Rigby from UBS.

Jonathon Rigby UBS Investment Bank, Research Division - MD, Head of Oil Research and Lead Analyst
So a couple of questions. The first is on the -- getting some sort of assurance around the investment that's now going into the renewable space. I can see the strategic rationale. It's clear. And you do talk about it being lower risk.

But I think there's clear examples in the past. You are one of them with SunPower, for instance, where it's clear that the company entering a new area of operation doesn't fully understand all the risks that they are dealing with, and that's not an accusation to yourself. I think others have found the same issues.

And so what I wanted to ask was -- is to what degree and what assurance can you give us that you are comfortable that the risks you're taking, you have been able to sort of incorporate into your planning? And I'm sort of very struck by what looks like increasing sort of conventional wisdom that 5% or 6% return on assets can be grossed up to a 10%-plus return on equity in an increasingly competitive environment. So I just wonder if you could just talk about that in the round.

The second is, if you're correct, however, I'm struck by the capital structure you described at the end. So driving gearing back down below 20%, reiterating the dividend. Does the capital structure in the way that you do with capital going forward change as the business mix changes through the 2020s?
Patrick Pouyanné TOTAL SE - Chairman, CEO & President

Jon, I think that first, on renewables Philippe will come back extensively. And I think that we are engaged in this business not from today. We made some mistakes. The first investment in SunPower was not the best idea, but since 2016, we have built teams. We have invested in Total Eren in a minority position to learn, to better understand, to evaluate, to see because Total Eren is driven by experts in renewables. The CEO was the previous CEO of EDF Energy, New Energies, which was one of the success leaders of the field. So we have made that investment.

We have made some direct investments and recruited people. And I can tell you that at the executive committee of Total, which is meeting every 2 weeks, and where we approve all investments above EUR 20 million. We have, I think, every week now, a renewable project. So we learn and so it's accelerating and that means that of course, we are more and more comfortable.

And today, I am able, for the first time, in front of you, to tell you, yes, we embark in this new strategy, I use the word transform, and we have ambitions in terms of net production of the equivalent of 500,000 barrels per day in 10 years. As the CEO and with the executive committee, we have the feeling that we analyze the risk of those projects.

It's true that we have to anticipate. What does mean an electricity market? In Spain, for example, where you will have so many solar plants, intermittences, going to the grid, and all producing when the sun is at the top and less in the night: there will be an intraday volatility, which could be huge, which is why the word “storage” appears in the presentation. We have acquired staff with the idea that it will be helpful to develop energy storage capacities in the future to develop this renewable business.

But it's clear that the electricity world, not only for Total, for everybody, will offer new patterns with new risk. It's why we need to be very strong as well, developing our trading teams to be able to interconnect the market and to deliver the value out and to manage that risk.

If today, we are able to shape that strategy and to show you some figures and to give you some objectives, 5 years is not far from there, it's tomorrow, it is because we consider that we have a good understanding. I would not have done that presentation even one year ago. But we have accelerated, and our teams are delivering to us more and more projects. So that's the first question.

And honestly, on the return target, I don't lie to you, Jon. I can tell you, the model works. Of course, let's be clear, it works because there is today very low interest rates in the market. That's clear. But I will tell you, if the interest rates are coming up again, the project will not be developed at 5%. We would need more, not only for Total, but for the competitors. So that's clear that today, you are in a specific situation where you can leverage these very low interest rates. And at the end, all the equity we engage and the 10 gigawatts projects we have announced this year have a return of 10%. It's a minimum because in India, it was 13%, Japan 20%. So you have more. So there is no miracle. It's just the situation of having access, I would say, to capital with very low interest rates.
I don't know if this capital structure has changed as business changes.

**Jonathon Rigby UBS Investment Bank, Research Division - MD, Head of Oil Research and Lead Analyst**

sort of the balance sheet and sort of pay out.

**Patrick Pouyanné TOTAL SE - Chairman, CEO & President**

The question, honestly, I'm not sure if I captured it.

**Jonathon Rigby UBS Investment Bank, Research Division - MD, Head of Oil Research and Lead Analyst**

The sort of follow-up was that the capital structure that the idea of where you want gearing to go, where you see the dividend is sort of couch still in very much in sort of oil and gas major terms.

Meaning is that going to still be the case? Or would you look at different capital structure models as you go forward because the business model changes?

**Patrick Pouyanné TOTAL SE - Chairman, CEO & President**

Yes, but no. I think to be clear, Jon, I think we cannot shift from one day to the other. I'm convinced that, today, our challenge is to convince the investors that the model we propose, which is to create this multi-energy company, this broad energy company, having on one side oil and gas, and on the other side electricity and renewable, is viable and that we can develop it. We need time to do that.

We think this is the best position for this transformation as an oil and gas major, that we still are, and we intend to remain. We won't enter into a decrease of our oil and gas business. Even if we stabilize in 2030, the oil production could be a little lower. This is not what we offer.

I think we are offering to investors 2 things: on one side, a dividend high-yield because it's a way to tell them: “give us time to do that and trust us”. And at the same time, let us, allow us, to reinvest part of the cash flows in growing this renewable and power business. So it's premature today to do what you propose: to change the payout, et cetera. We do it because we consider that we can do it with the financial balance of the Group.

And this was the whole exercise we have done in the last 6 months. We understand at which pace we should invest in order to grow accordingly to our ambitions. So, with our structure of capital and spending, we can, at the same time, offer this maybe unique model that we want to offer to the market and the investors, with a high-yield dividend. And at the same time, giving us the time and the money to change the pattern of the company.

**Operator**

The next question comes from the line of Martijn Rats from Morgan Stanley.

**Martijn Rats Morgan Stanley, Research Division - MD and Head of Oil Research**

I have 2, if I may. The first one is about expressing your total energy production in that figure of petajoules
per day, which I really appreciate, and I think is hugely interesting. We, ourselves, have done some analysis on expressing the financials of a broad range of energy companies per unit of energy, per joule. And one of the things that struck me in this analysis is that if you look at companies that are more in the renewable space or the utility space that their capital employed or their Capex budgets per unit of energy, per joule, are hugely higher.

They're about sort of 4, 5x higher than oil and gas, which is already a capital-intensive industry. So now sort of going through these numbers, I tend to delve, frankly, since the capital intensity is so much higher, maybe we should just expect that over time, the total energy output of companies like Total and your peers, that they will actually just shrink, i.e., there's only so much Capex that goes around. Just if you move into a more capital-intensive area, maybe just keeping up total energy output might just be simply too challenging.

But today, you're presenting a sort of kind of sort of contrary sort of view to this in the sense that, not only are you talking about total energy production going up, but then seemingly also moving into these very capital-intensive areas. Now we often have discussions about what are the returns that lie on the other side of all these investments. But the transition itself is also quite interesting in the sense that it sort of suggests sort of quite a large Capex hump, a period of very rapidly rising capital intensity.

And I recognize that this is quite a long-winded way for asking, in principle, a relatively simple question. But are you sure that $13 to $16 billion in capital expenditure is really enough to make this -- the changes to the business mix that you propose, rising total energy output in more capital-intensive areas. Is this $13 billion to $16 billion really enough for that in the long run?

**Patrick Pouyanné TOTAL SE - Chairman, CEO & President**

For the next 5 years, the way we have done it is that we looked to what is the amount of equity we need to inject in all our renewable projects in order to grow. So we have made it. And we have various models between the Indian projects, the Spanish projects, French ones. So today, we have various models. So we are able to have a mix and to have a good evaluation of what will be required.

And as I said, to grow at the pace to reach the 35 gigawatts by 2025, we need $2 billion plus per year, I would say. We put that as a floor. And we look also at the rest of the company, at what can be arbitrated or not without impairing, of course, the cash flow of the company. And the results that we gave you are clear, I would say, bottom-up approach of the organic Capex that we need. Then, there are assumptions about acquisitions and divestments, which are giving you the global capital investments.

But yes, I'm confident with this figure. And again, the advantage of being not a utility, but an oil and gas company is that we have the leverage of the oil price. So, is the price going up again? It will go up again. We'll have extra cash that we can allocate in order to monitor this Capex, and that's why we give you a range. But yes, Martijn, I'm confident that we can stick within the $13-16 billion range.

It's also true that, doing that, we have made some arbitration in some segments in line with the oil
strategy. We revised the oil assets that we have, not only in Upstream and in Downstream by asking ourselves: “What do we want to do in this segment? How much do we allocate of capital?. The demand will change, so why should we invest in many retail networks if we think the oil demand will lower?”

So that's the question mark. So, there are some arbitration behind it, in line with the strategy, but I’m confident on it. We spent together a lot of time, I can tell you, to read the reports of all our competitors and the utilities competitors, their financials, to better understand their metrics and because we wanted to make a presentation where we could find the metrics, which could be consistent.

To be honest, the notion of Capex is maybe not exactly the same as ours there. I have the impression that they take the full Capex, I would say, the gross Capex whereas we take the net Capex. When we give you a Capex figure, this is our equity part. Of course, the off-balance sheet is not in the Capex figure. That means that the off-balance sheet of Total, I'll be clear, will grow. But from this perspective, we have a robust balance sheet, I would say.

And at a certain point in time, it will not grow indefinitely because you will re-circle your leverage. Once your projects have been delivered, after 6, 7, 8 years, you are recirculating the same amount of balance sheet commitment. So I would say that's the way we look at it. But I'm pleased that you support the petajoule-per-day approach. I hope that all your peers, which are participating in the call, will do the same.

Yes. To be honest, I have difficulties here too, to transfer all that. Okay. Next question.

Operator
Your next question comes from the line of Lydia Rainforth from Barclays.

Lydia Rose Emma Rainforth Barclays Bank PLC, Research Division - Director & Equity Analyst
And then I will get used to petajoules as well. Two questions, if I could. The first one, on the tech center that you're establishing. Can you just walk me through, how is that different to the digitalization factory that we were talking about back in February? Does this build on that? Or are they 2 completely separate areas?

And then the second one is -- and it's linked a little bit back to Jon's question earlier, there is a lot of change within Total. You are accelerating that change. How do you prepare the organization to perhaps move more quickly than it has in the past?

So for example, you talked about Africa and wanted to build up the renewables capacity there. How do you do that quickly enough now? And effectively, does that decision-making process need to change from what it has been historically?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
The first one, no, it's different, Lydia. Maybe I have not been clear. The Digital Factory is purely dedicated to digital. Of course, it's working for all the divisions, the Upstream, Refining and Chemical, Marketing and
Services. It’s established. It’s a new tool, 200 engineers going to 300. We don't want to disturb them. It’s brand new. So, we'll let them work. They might be, later in the future, we'll see, but we don't want to disturb that. They have to deliver.

We have, I would say, a road map of many business cases, which are, by the way, given to them by the assets, not by the technical centers and technical divisions. So of course, you can think we can merge everything. This one we tend to protect because we have a clear objective for delivering value by ’23, ’25, and we want to build it, to raise it. Maybe later, we'll see if we need to bring them.

The technical center, the One Tech concept, is really to take all the divisions which are supportive of operations and projects in E&P, in refining and chemicals, in marketing, there are more, not so many. And in gas renewables and power, they are quite minimum, but there are quite a lot. There are some hidden competencies, somewhere in the direct subsidiaries, that we have to bring all together in order to be able to use existing competencies to build this industrial base for our gas, renewables and power.

And also for, I would say, training them, helping them in terms of evolution of competencies. So that's a different approach. But again, the idea is to have a core center and to use the existing competencies to build our renewables and power business.

To Philippe, you take the second one? Renewables in Africa. What do we need to do?

**Philippe Sauquet TOTAL SE - President of Gas, Renewables & Power**

Yes. Clearly, it was stated, there is a real potential of developing renewable in Africa because mainly with solar we can compensate for the lack of development of the grid, and there is a lot of sun. Having said that, these are costly projects, they are capital-intensive. And so we need to have a stable scheme in order to invest on a profitable and safe basis.

And therefore, the negotiations are taking place with the various governments in this continent. And there are some small projects that are now being developed. We have some plans already in South Africa. There are some under development in other countries. But yes, this still takes time because we want to develop this business on a profitable basis.

**Patrick Pouyanné TOTAL SE - Chairman, CEO & President**

But your question is good, Lydia, just to add something. I think until now, we have developed a renewable business, I would say, as separate teams. Many teams are trying, as I answered to Jon, to better understand the business. In Africa, for example, it's Total Eren which is in charge and has its own objectives. And it's clear that in Africa, honestly, we face, where we were trying to make gas to power plants I remember in Nigeria, I think Arnaud has worked hard on this type of project like myself, the fact that, unfortunately, financing a power business in Africa is quite challenging. And in fact, we could hope that with renewables, which are smaller projects, the issues could be solved, but it takes some time because people are not prepared. So that's a challenge.
But I think today it’s a very important day. As I said, we have announced the concept of One Tech. And I think a lot of my employees, I think, around the world are listening to what we say. I’m convinced that there is a signal that these renewables and power are absolutely part of the business model of Total.

So tomorrow, when we will go in all these countries, it will be obvious for management locally that they have the right, even if they are in charge of E&P, to look to renewable projects, and we’re a driving force, and then maybe we'll go quicker. I think the message would be enthusiastic. You know what we’ve done in Qatar as well has been on the same philosophy. My view is that the signal is launched today that, yes, we are embarking in this strategy on a worldwide basis. And I'm sure more and more ideas will come and people will embark because they are all willing to contribute to this climate change challenge.

Operator
Our next question comes from the line of Oswald Clint from Sanford C. Bernstein.

Oswald C. Clint Sanford C. Bernstein & Co., LLC., Research Division - Senior Research Analyst
I wanted to ask a first question on integration across the electricity value chain as well. But more specifically, on the final side of the customer side. Now I want to get your thoughts whether you think you need to have more big customer and partnerships to really maximize the value in this chain. You -- I mean you talk about retail customers in Europe, but I wanted to see if -- do you think that's enough?

Or you should be focusing as well on some of these big global corporates, like, for example, some of these tech companies and just offering them global power contracts that utilities can't. I mean, I know you have 60% of your customers in Europe, and that's your base, but there's a lot of competitors that are also trying to sell them clean power. That's the first question.

And secondly, it’s good to see the current conviction around the gas and the LNG. But I wanted to zoom in on India. I mean, a lot of LNG import growth in LNG expected in India. You have a position there with Adani, but a little bit tricky for us to see just how profitable that value chain, LNG value chain is in India. The Indians' clearly are very good at getting low LNG prices. So I wonder if you could perhaps share a little bit of color around that LNG supply chain as it relates to India, please.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
I'll leave Philippe answering to the India question. On the first one, I'll be clear, with Philippe as well, we are working with the same big companies. These big tech companies are very good to make competition. Today, they want to sell the cloud to Total and in exchange of the cloud, they are ready to take 50 megawatts of solar plants, which is not enough.

Now but we have this type of discussion, obviously. You have noticed probably that we have done something last week. Philippe will come back on it. This is something quite original, we have assigned to ourselves the largest corporate PPA between solar plants in Spain and all our European plants in the company. That means that we have designed an internal model and the intent is to offer it to big corporations. So we know we can manage the risks of such a contract. And the idea today, of course, is
not only to do it with Total. We have done it for us and we have some discussions, to be clear, at high corporate levels, sometimes CEOs are involved themselves. There are a lot of companies, not only the tech ones, who are willing to green their electricity. Everybody is committing today to carbon neutrality.

This is a business, which will lead to what we call corporate PPAs and which will probably be the next wave of contracts. So on these ones, yes, we are willing to develop partnerships. At the end partnership is a big word: what do you sell to me and what do you buy from me? Let's be very clear. It's like for ownership, but it's more immaterial because none of them wants to be really, I think, in the hand of only one supplier. None of them, even if they like to establish monopoly, want to be in the hand of one supplier in front of them.

So that's clear and maybe Philippe will come back on it. It's all what we call the Solar Distributed Generation business, which is not big solar farms, but I think Philippe will come back on it in his presentation. So I will leave it to him.

India LNG value chain?

Philippe Sauquet TOTAL SE - President of Gas, Renewables & Power

India, clearly, we see high growth in, even 2020, we see a very high growth in India, which is becoming one of the largest LNG markets. So development is already a reality in India. You have to be aware that we have been in India since 15 years when we were partnering with Shell in Hazira and so we know exactly the behavior of the Indian customers.

We have never been selling under the market price, I can tell you, in India. What is clear is that when the prices are low, we are selling more LNG than when the prices are high. But across the years, we've managed to fill Hazira and to make profit. And with the partnership that we have with Adani, we will now be an inside player in India, and we see room for optimization and for profitable growth. We are confident that, yes, we can combine growth and profitability in India.

Operator

Our next question comes from the line of Thomas Adolff from Crédit Suisse.

Thomas Yoichi Adolff Crédit Suisse AG, Research Division - Head of European Oil & Gas Equity Research and Director

Two questions from me as well. Just going back to your beautiful charts on renewable generation and how you're showing your target IRRs of more than 10%. I believe this time last year, you presented it as at least 15%, including farm outs. Looks like a bit of a downgrade here. Or are we talking about a wider range across the different geographies you've entered since?

And the second question is relating to your credit rating. And correct me if I'm wrong, single A is probably the minimum acceptable to operate your business effectively. And if my numbers are correct, your credit
metrics were consistent with the single-A rating in 2019, around 44% funds from operations to adjusted net debt. But you are below the 30% threshold in 2020 and probably less than 25% at least on my numbers using Brent at $40 and assuming cash flow after interests of $15 billion, $16 billion.

So if we assume you pay your dividend 100% cash and no script and that’s $8 billion and Capex is $13 billion, oil stays at $40 and refining margins don’t recover as you assume. How do you drive it back to 30% in the next few years if asset sales are also difficult?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
I will leave to Jean-Pierre. He can answer the second question. Jean-Pierre?

Jean-Pierre Sbraire TOTAL SE - CFO
Yes. So credit rating. As you know, Moody's and S&P dramatically changed their price deck. It was in March or April after the drop in oil prices. So at this time, we were able to maintain our rating. Their changes were on the outlook. We were stable before. Now we have a negative outlook.

I think it was mid-September when S&P maintained its outlook for 2021 and 2022 at a $50 per barrel price deck. And $40, by the way, for 2020. So at this level, I do not see any reason given the resilience that Patrick mentioned to you to be downgraded. So having the discipline regarding our gearing, having these targets to maintain the gearing around 20%, I think will protect our credit rating. And I think that it will be well received by the agencies.

Thomas Yoichi Adolff Crédit Suisse AG, Research Division - Head of European Oil & Gas Equity Research and Director
But if we stay at $40...

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
And you are right. I was looking to the September 2019 presentation, because I had always in mind my 10%. So that means that we’ll come back to the question of Jon. We have learned in the year, and we realized that if we wanted to be successful, to get some projects, we have to accept the target to have a 10% minimum return, but at 10%, we are successful. I can tell you. This is what I mentioned during my speech.

But at 10%, we have been able to get the projects and to put them in our portfolio. So that means that this is the right metrics that we need to consider if we want to develop the business. But the ambition of last year, maybe it was because we had more Japanese projects in our heads than some Spanish projects, I would say. So the metrics that I gave you today, I can tell you that at this level we are competitive.

In fact, let me be clear, it's always the case. If you go to compete in a major Middle East tender, where you have everybody coming, I can tell you, at 10%, you are not winning. By the way, in Abu Dhabi we lost, but we won in Qatar. So that's different. But the idea is to try to have direct negotiations. And that’s what we've done in Spain, having access to 3 pipelines of 1 plus 1 plus 3 gigawatts, with direct negotiations. That
means that you need smart teams on the ground. You don't operate that from Paris. That means that, what could limit the ambition is that in renewable electricity, you know that it's a national approach with national regulators.

And to identify the good opportunities, you don't do that with bankers in Paris, which always come to you with the big M&As. But if you want to be smart, you need teams. We have a good team. I can pay tribute to them in Spain. That's clear. And I think if we want to continue to grow, we'll have to put the teams in the various countries where we will think there is a development to be done. Clearly, we will establish something in the U.S. because there is, of course, big companies, but you have plenty of opportunities as well.

And last comment for you Thomas, it's true that the returns are lower than for oil and gas, yes, but the risks are not the same as well. You know it when you sign a PPA over 15 years. In oil and gas, I have nobody which is giving me a predictable revenue. So that's chicken and egg, but I will not come back to you with lowering my 10% next year.

Operator
Our next question comes from the line of Irene Himona from Societe Generale.

Irene Himona Societe Generale Cross Asset Research - Equity Analyst
Patrick, I'm looking at priorities 2 and 4 of the cash allocation, dividend and buyback. You used to communicate in terms of the proportion of cash flow that was right in the previous strategy to return to investors. Today, you told us the dividend is supported at $40 gearing to come down.

During this transformation period, and given your view that lack of investment may very well push prices towards $50 or $60, but of course, you need to continue to invest in low carbon. So in this new -- in this transformation period, what is the right proportion of cash flow that assuming you deliver the balance sheet would be correct to return to investors?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
I'm not sure I even expressed in this presentation a percentage of returns of cash flows. You can understand that in these times where we are today, Total and the Board of Total are already quite bold by confirming and repeating that we support the dividend at $40. When at the same time, all our competitors at least in Europe have just given up on their dividend. So I think it's already a strong signal to investors that we are ready to maintain a high-yield dividend. Even if, as I said, the Board is expecting some stock rerating thanks to that policy.

But it's true, that we are using the balance sheet, as we are increasing the gearing. And so that means that the Board, because he’s seen in the figures and the resilience of the company, is ready to support. But at the same time, he is thinking that the priority will be, and nobody knows how long it will be, I would say, to come back to a normal environment and get out of this pandemic and this world crisis. So going beyond what we said, you need quite a short term and long-term view. I think what we told you today is already
a strong message.

The other strong message we gave you is that we will increase by $5 billion of cash flows in the same $50 environment between this year and 2025. So obviously, the matter will be to allocate this capital again, first, and you can make the math. At $50, we need additional cash flow to deleverage the company, and we'll be under 20% by 2025, more or less. That means that at $60, the question will be sensible.

This is why we put on the same chart that we can be flexible at higher prices. But that's not so easy to commit on the long-term on such metrics. I know that some of the peers have done it. But they have first cut their dividend. So for the time being, we are concentrated on maintaining the dividend. And I think it's the best message we can deliver to our shareholders.

Operator
Your next question comes from the line of Michele Della Vigna from Goldman Sachs.

Michele Della Vigna Goldman Sachs Group, Inc., Research Division - Co-Head of European Equity Research & MD
Thank you, Patrick, for the clear vision on decarbonization growth and improved profitability. I have 2 questions, if I may. The first one is, if I can come back to cash return to shareholders. Clearly, Total stands out for having maintained the dividend through the crisis. But when I look forward at the numbers, the dividend yield effectively is costing you right now about 9%, and the cost of debt post tax is less than 2%.

Now I perfectly understand the importance of a strong balance sheet. But given this complete difference between the cost of capital, effectively that your investors are charging you versus the cost of debt, wouldn't it make more sense perhaps to focus on buybacks rather than financial de-gearing at this juncture?

And then a second question, perhaps a little bit niche. But when I think about your refining and chemical business, you are moving away from mega projects, mega plants of refining and petrochemicals towards smaller ones focused on biofuels and biochemicals, which are more local. And where the economics really are driven by the local logistics of collecting and delivering waste in an effective way. I was wondering, do you think you have the right capabilities in-house for it? And do you think you need to change the way that business is run for this future reality with a bigger share of biofuels and biochemicals?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Okay. I take your point, buyback rather than gearing. We are experienced in managing an oil and gas company with volatility and, honestly, we are sure that we'll see higher cycles. But after the higher cycles, lower cycles. And so if we want to have a steady return policy to our shareholders, it's much better to have the capacity to weather the storms like we are trying to do it today, like we are doing it today, by the way.

It's a matter of trust. I understand the math that you mentioned, and the Board has discussion about it, to be honest. That's true, but today, it will be nonsense to go for looking for equity from our shareholders.
And I prefer Jean-Pierre to go on the bond markets and maybe even the green bond markets. This is the next challenge. But with all what we have announced, I think it will not be so complex to convince bankers to issue on the green or sustainable bond markets today. But again, my message to you is that with all what we have announced, the Board is expecting a rerating of the stock, and so the yield should diminish.

That's a good answer. And then buybacks might be an option. The big debate, and it's why it's written like that, if you have additional cash, buyback is probably better than increasing largely the dividend in the future.

The second one, I would say, no. I mean, let me be clear, don’t make a mistake. First, it's not because we have focused the presentation today on biofuels, that Bernard has abandoned the large Amiral project with Saudi Aramco in Saudi Arabia, which is progressing very well. We have all the allocations from the ministry. So it's not abandoned. But having said that, it's true, and Michele you will understand, that Total will not build a new refinery elsewhere in the world. I mean, it's clear.

So we still have some petrochemical projects in Saudi Arabia. In Korea, with the Korean platform, that's the core of it. And then the biorefinery. So a question for Bernard is, do you need more new different competencies for biorefining? I would say that on bioplastics, honestly, our polymer business, people are very accustomed to the size of plants. We have done our first plant in Thailand. But Bernard, about competencies and capabilities on these niche markets, what do you think?

Bernard Pinatel TOTAL SE - President of Refining & Chemicals

One of the answers is the fact that we are going to slightly change the organization by creating a biofuels business unit with dedicated resources. That will be a team, which will be focused entirely on biorefinery and growing the business in Europe and outside of Europe, which, of course, requires certainly a different set of skills when conducting larger petrochemical projects. So we can lead the 2 strategies, I would say, both growing large platforms in petchems, and at the same time, yes, growing high value-added niches like biorefineries.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President

No. But Michele is giving you a good idea, which is to go and recruit some people in one of the good competitors in biofuels to strengthen our new business unit.

But again, I think, Michele, the size of the projects that we have in these biofuels and bioproducts are of the size of the polymer plants. We have in the company, our chemical guys, our petrochems, our Belgian part of the company who are able to build this type of small plants. Not the French ones, they love large projects.

Operator

Your next question comes from the line of Lucas Herrmann from Exane.

Lucas Oliver Herrmann Exane BNP Paribas, Research Division - Head of Oil and Gas Research
Two questions if I might, Patrick, regarding the renewables business. Yes, maybe one of them is a little unfair at this stage. But the first was just on PPAs. Can you give us an idea as to all the projects you're developing, what proportion of the output typically is PPA covered?

And the second is when you talk about 120-terawatts hours of electricity or electrons into the future, can you give us any idea as to how you'd expect that the end markets for those electrons to split? So how much do you think will go to EV? How much go -- might go to hydrogen? How much retail? How much corporate?

I'm sure you looked at the different value chains and opportunities. But just to -- for us to get some sense of, yes, what are the markets that are going to be according value to the different streams?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
So the first question is easy. The second one is for Philippe. I love the questions of Lucas. Now the first one is clear because according to what I just described to you, the instruction given to our teams is that we want to cover with a 100% PPA. Having said that, it's clear that we have done one first exception with our entrance into the Seagreen offshore wind projects in Scotland, where, by the way, it was a long discussion, I can tell you, with SSE.

They wanted to sell us 40% PPA, 60% project. And we said, no. We want at least 70% and 30%, knowing that we agreed together, that the last tranche of production could be submitted to the next round for CFD in the U.K.

We had yesterday another discussion with our teams, which jumped into a 70-30 business model and we told them at the executive committee level, “Don't go too fast” because, again, what we like in renewables is not only the volume, but it's the predictability of the revenues.

So this is what we'll explain tomorrow to our investors. I think our objective is, honestly, to maximize the level of PPAs. We can accept going merchant from time-to-time at maybe 30%, but not more, as we have done it once.

The second question, I'll leave it to Philippe because I know he knows everything about the math.

Philippe Sauquet TOTAL SE - President of Gas, Renewables & Power
Lucas, thank you for this question, I'm not sure if I have the right answer. But what you should bear in mind is that even if, of course, we spend a lot of time developing new markets such as EV and green hydrogen for the time being, which will remain a very limited part of the worldwide market or for electricity worldwide production.

So if I had to give you a guesstimate, I would say that it will be some, let's say, 2%, 3% for hydrogen and maybe a bit more for EV. But clearly, the bulk of our production, still in 2030, will go to, I would say, the overall power market.
Patrick Pouyanné  TOTAL SE - Chairman, CEO & President
Yes, I fully support the answer despite it’s a complex one. It’s probably a 45% retail, 45% corporates and then EV and hydrogen. Honestly, EVs, Alexis will speak about it. But when we look at the end at what do represent 15,000 or 20,000 charging points in cities, it does not consume a lot, to be honest. So, if you want to make money, it's not only through electrons. You have to source the service part of it, but Alexis will come back on that.

Lucas Oliver Herrmann  Exane BNP Paribas, Research Division - Head of Oil and Gas Research
Just coming back on the PPA question. Can I just follow-up on the PPA? You mentioned earlier, you spent a lot of time looking at your utility brethren and what they -- how they report, et caetera, et caetera.

They also have a tendency to give a fair indication of what the PPA levels and terms are. Might we expect that you will give better indication to the future of what the PPA terms are, so we have a better idea of what revenues are?

Patrick Pouyanné  TOTAL SE - Chairman, CEO & President
We might consider giving you all the data sheets of Total or maybe not, we'll see. I will take the point, Lucas, and I will ask my colleagues to make a benchmark on the utility company's disclosure. And we'll look at it.

What I propose Ladislas is that we take a last question or 2 before we'll stop to go to the Zoom because we have another session of Q&A, and I'm afraid, otherwise, we will extend until midnight. So I propose to stop at 4:30 like it was planned. So maybe let's take 2 questions before to stop, and then we'll move on to on the Zoom by Philippe, and then we'll have another session of Q&A.

Operator
Your next question comes from the line of Bertrand Hodee from Kepler Cheuvreux.

Bertrand Hodee  Kepler Cheuvreux, Research Division - Head of Oil and Gas Sector Research
Yes. In fact, the question I had was exactly the same as Lucas in terms of PPA and merchant exposure. But maybe I'll try to find another one, which is in fact, when I look at your 2025 guidance for a low-carbon contribution, should I understand that, in fact, there is no implicit electricity price or merchant price built into that assumption and as you are, in a way, fully secured by the PPA? Is that a correct statement?

Patrick Pouyanné  TOTAL SE - Chairman, CEO & President
It's exactly that because, by the way, the Seagreen project, which is the only merchant for 30% will not produce in 2025. So it's exactly that. You're right. You have found the solution. Next question, but Bertrand, don't worry, we'll take all the questions from everybody. It's just a matter of time. Next question?
Your next question comes from the line of Christopher Kuplent from Bank of America. This will be our last question for now.

Christopher Kuplent  
**BofA Merrill Lynch, Research Division - Head of European Energy Equity Research**

Could I squeeze in 2 questions, please? The first one, hopefully quick, Patrick, you were referring to countercyclical M&A. And I wondered in that $13 billion to $16 billion, how big a role net acquisitions play. You already mentioned that the $12 billion or below $12 billion next year is largely organic. But just wondered whether you could break down your view of organic spend versus inorganic.

And my second question is a bit more philosophical, which is if you look at the renewable space, you've obviously got your own listed subsidiary in some power. You witness that free cash flow yields are pretty meaningless in terms of valuation metrics and EV/EBITDA multiples or price-to-cash-flow multiples trade at a multiple higher compared to where the Total group listing gets you today.

So I wonder how you think around communicating better with different metrics that speak to the renewables growth, which, according to your own presentation today, will remain free-cash-flow negative for the foreseeable future. So I wonder how you're thinking around that project -- problem and whether indeed you think allowing the equity markets to have a clearer view in the way that you have an independent listing for SunPower is the way forward.

Patrick Pouyanné  
**TOTAL SE - Chairman, CEO & President**

I think on the first question, if I remember the balance between acquisitions/divestments is around $1 billion, I think, maximum. So that means that there is much of the Capex that are organic, and there is plus and minus which is $1 billion extra. Of course, it's linked to the possibility to divest, but this is the metrics we have put in this business plan. And if we want to acquire more, we'll have to divest more. It's clear, I would say. So that's the first point.

On the second one, we try to communicate on it, maybe not enough. I know that maybe it's not good to show that it's cash flow negative, but all of these renewable companies are cash flow negative. It doesn't matter. So the question is, of course, if we want to embed in the valuation of Total the valuation of this renewable activity, which compares, when we speak about 35 gigawatts, to a lot of these independent renewable companies, which are much smaller and have huge valuations. We need to give clarity on what we are doing, to attract these multiples also on this part of Total. So that's a challenge.

So yes, we intend to give step-by-step clarity on what we do, and I think it was the first step. And you have a slide where we have figures. But should we go to IPO? All that is very premature. It's not at all what I explained to you. I just explained to you during one hour now that we intend to build a broad energy company and to have in the same company, on one side, the oil and gas business, on the other side, the renewables and power business.

The renewables and power business is benefiting from the cash flows coming from the oil and gas business. So we have a good engine to make that transition. We want to take time to convince the market that this
is the right model. If we don’t succeed, we’ll see. But by the way, as you said, when we are building such a portfolio of renewable business, it will not be difficult if we think it’s the best options to go in another way. But it’s not what we intend to do for the next 5 years.

So Ladislas, the floor is yours. And again, to all the ones who have questions, don’t worry, we’ll take all the questions, but after the 3, next Zooms.

Ladislas Paszkiewicz TOTAL SE - SVP of IR
All right. So thank you for this first set of questions. And now we are entering the second part of the afternoon with the focus presentations. And so we’ll start with Philippe with a presentation on renewables.

Philippe Sauquet TOTAL SE - President of Gas, Renewables & Power
Okay. So good afternoon to all. So my challenge is to convince you that we are ambitious, but we are not dreamers. But let’s start by the dream and by reminding you of the market and the growth that we see on this global solar and wind market. This year, we have seen, even with the COVID, a 15% growth. And this growth is clearly geared to continue with the greening of the planet and the carbon-neutrality mission that have been announced.

The lion’s share of this growth will be for solar. We see solar as being the cheapest technology in many countries around the world. But doing that, of course, we are over technology of interest. And wind offshore, in particular, for which we feel that we have a unique competitive advantages, should represent in 2030 around 200 gigawatt. So 5% of the overall market.

What also is important to be noticed is the fact that around 80% of the growth is concentrated in 4 different areas: China for sure, which will represent more or less 40% of the growth; Europe being #2 with, of course, the Green Deal gearing up via the market to high growth; and then in India and U.S. at approximately same level, 10% of all the growth. So no surprise if we are focusing our development there but not forgetting, of course, other continents and countries like South Africa, where unique advantage are still to be developed. But clearly, those 4 areas are the one in which we will have the greatest share of our business.

One reminder about also our history in those businesses. Yes, it was reminded that we invested in SunPower in 2011 but that was not maybe the greatest investment that we made. But we learned from this investment, and we started our new ambition and mission to become the responsible energy major. And we created Gas, Renewable & Power branch in 2016.

We are very clear that we are more or less starting with a blank sheet. And so we needed to have, first, competencies, talents, assets. There was no hesitation for us, but we needed to make some strategic acquisition. And this is what we made, and you all remember this acquisition of Saft, of Direct Energie, of Quadrant, just to mention the most important.

But what we see today and what you see on this chart in ’20 is that the growth and the number of deals is
clearly accelerating. And it is accelerating just because, as Patrick mentioned, we have now teams that are competent and competent enough to fuel our growth with ideas, with what I would call, semi-organic growth. This is giving us a lot of opportunities that we can exceed on a very low cost of entry. And what is also very clear that most of this deal in terms of number now is focused around renewables. Among the 12 deals of 2020, 10 are around renewables.

And where do we stand today after those 4 years? We could say, and I'm saying it, I think that our renewable business is starting, just starting, but it's starting to reach a critical size when we compare to the leaders. What I mean by the leaders, clearly, the utilities because all competitors are far from being at this level today.

So we are starting now to have significant asset, significant yield. We are positioned on all our growth markets, because we are a large company, we have a large ambition, and we can afford to be on several of these markets. So the solar farm, which bring size and low cost of producing electricity. What we call a solar distributed generation, and we'll come back on that because it is not, of course, most well-known part of our business, but it delivers high growth and higher profit because of higher barrier of entry.

We're not sure, of course, which is a needed complement because there are countries where there are a lot of wind but not so much sun. And wind offshore, which is, of course, the area where we are willing to grow on the basis of our core competencies, but as utilities clearly do not have for all of them at least.

And batteries, we made the acquisition of Saft, one of the world leader of this technology. And we are among the few participants of this service segment. –At the end of 2020, we will have already 7 gigawatt of asset in operation. So it start to be meaningful. Of course, it is small at the scale of Total. But in the world of renewable, I can tell you, that it is very significant already.

The dynamic that we have now is not only limited, of course, to those assets in operation because we have also project under construction. I will show in a minute some of the most significant. We have also identified late-stage development project and we are confident that it can be developed among the next year and, clearly, before 2025. This is why Patrick was mentioning that our former objective of last year of 25 gigawatt in 2025, even if it was easy to memorize, is clearly something that is too easy for the team to achieve. And so we had to set a new target, and this is why we decided to have this 35 gigawatt. So it means that we have more or less 10 gigawatt to identify. Based on what is our track record today, we have little hesitation that we can do it, limiting ourselves, of course, to only profitable opportunities.

So some example of where we are. The first country, of course, today is our own country, France, where we acquired Quadrant. Quadrant was and is still now one of the main renewable developer in France. It was crazy in 2013. So there's already in this company more than 300 professional. We have already 7 years of experience that we can capitalize in order to fuel our growth. These professionals are competent in both in wind and solar. You can see on this map of France the different dots for wind and different dot of solar. And you see that we are today balanced between wind and solar, which is understandable for a country such as France. We have 1 gigawatt of operation right now, and we have already secured the
pipeline to have 4 gigawatt by 2025.

One example of what I call semi-organic growth was the acquisition this year of Global Wind Power. It's an onshore wind developer. But I can tell you that without the competencies of, Total Guanghui, as it is named now, we would have had a lot of difficulty to make this acquisition profitable because we need all the team in order to expedite the development of the project that we have been acquiring.

What we can say today is that if Total in France is clearly the largest energy company, we are already now among the 3 big players integrated in electricity and in France. This is giving a lot of stability and a lot of confidence going forward on our ability to remain profitable and to continue growing.

After France and Belgium, Spain is to become our third market, where we are again one of the leading integrated electricity company. So we will be 1 of the 4 once the deal with EDP will be closed, so hopefully very soon. It is also a market where we can grow solar generation, because it's a market where there are a lot of sun, more than 2,000 of generating hours for solar project, where we have only 1,000, so 50% less in France or in Germany. So it's really a market which is very favorable for low-cost solar.

On this market, as we mentioned, we have managed to secure a 5-gigawatt pipeline of solar project, which is noticeable. It represents more or less the third of the total mission for 2025 of the country. We have managed to secure those 5 gigawatt through, I would say, a low-risk acquisition agreement. We have made agreement with 3 developers and it is a scheme where the developers are pursuing themselves the development of the project. And we are buying the project with payment condition on them reaching precise milestones that you can see on the chart. So, it's a very efficient way and very secure way for us to develop this pipeline of projects.

As I was saying, Spain is a country where we can produce low-cost solar electricity. Patrick reminded you about our strong objective to reduce our carbon footprint in Scope 1 and Scope 2. So we took advantage of the pipeline of solar farm that we are in the process of developing in Spain in order to walk the talk and mobilizing both farm to produce enough green electricity to supply 100% of the 6 terawatt-hour electricity needs of all our industrial site in Europe. And so we do that on the basis of our own solar asset.

We are doing that also thanks to our trading ability to balance the risk between the country's electricity price spreads because we deliver this electricity to our German colleagues on the basis of the German price of electricity. We have to balance the production of the solar farm and the consumption of our site, which is more or less 24 hours a day when, of course, a lot of them are only producing a day. But we have the trading ability of doing so. And we have signed what we call corporate in-housePPA, which is the largest corporate PPA that we have identified today worldwide. So when we say Total is walking the talk, it is a reality.

One example of high interest of what we are doing on large solar project, such as the one that we have won in Qatar, one of the interests of that was that it is a large project. But it was also a test of the competencies and the competitiveness of our team. Because we got that through a tender. Through this
tender, we manage without compromising on our profitability objective. We managed to win the tender with the record levelized cost of electricity at $14.5 per megawatt hours. And we were happy because we got the project on a profitable basis. It was a test for us to make sure that, we were able to have the best design. We are able to have the most competitive supply chain with attractive prices for the panel, but we are buying in China because we are the most competitive producer in the world. Therefore, it was a good test, and it will start in '21. As we said, our ambition, especially in the country where the group has been present for nearly 100 years is to develop on a negotiated basis other project that should deliver higher return.

Another country of interest, we have mentioned is India. We are targeting India as being one of the main market of today and tomorrow for renewable. You see on the chart that we have quite an impressive objective of 175 gigawatt of renewable by 2022. India is clearly key for our LNG gas strategy with high potential for them to reduce CO₂ by coal-to-gas switching and this was the main reason to partner with one of the largest private Indian company, Adani. But going forward, we realized that Adani was very active in renewable. We have created Adani Green, which is a listed and, very successful company. They were recently ranked by consultants as the world leader in solar development. So, they are very attractive and a very dynamic company. We managed to sign with them the agreement to create a 50-50 joint venture on the basis of more than 2 gigawatt of solar farm with a very nice rate of return, considering that these projects are completely derisked because we are already in operation and benefiting for 100% of their production of a 25-year PPA.

Total Eren. So, another example of what we did in order to attract the competencies that we didn't have internally at the time when we started in 2016. We identified that there was a very competent team, which created Eren in 2012. Pâris Mouratoglou not to give his name. But knowing that, Pâris was and has been active in renewables in 2000 when he created a company, which later on become EDF Energies Nouvelles, which was the listed company before EDF decided to buy 100% in 2011. Then, Pâris decided to recreate a new company, and it partnered with us in 2017. We have 30% of Total Eren today. They are developing in areas where it is complementary to what our own Total team are doing. Their mission and they are in the right track to achieve this ambition is to have 5 gigawatt by 2022, the year where Total has the option to acquire 100% of the share if we decide to do so.

Solar DG. So Solar DG, it's different market. It's peculiar to set up with no distributed generation for wind. But having the possibility at acceptable cost to develop a solar policing asset on the roof of different industrial companies is something that is attracting a lot of interest today in many areas of the world where it brings already lower cost of electricity rather than buying electricity from the grid. And you see that the growth is there, 15% per year.

It is a market that has been taught to us by SunPower because we learned from the mistake of SunPower, but we learned also of the success of SunPower. SunPower is one of the leader, if not the leader, of this business in the U.S. So we understand what is needed in order to make money in those business. We have started, as it was mentioned, to propose to multinational companies that are willing as Total to reduce their global carbon footprint to have kind of solarization project. We have one inside Total, and some
companies are considering it. We are amongst the few companies that can offer them this possibility.

It is also a sector where we have managed to attract the interest of Envision, a Chinese company. I don't know if you know this company, but it's a rather well-known technical company, which is involved in digital and in the renewable. We are on the verge of becoming one of the leader in the manufacturing of wind turbine. They have also a footprint in battery. So, a very dynamic company. We have a joint venture with them, 50-50, in China, which is developing today at accelerated space. Even if we have to be reasonable in terms of gigawatt, this will never be as important as a solar farm or the wind project that we are developing.

One word about SunPower because there was recent news for SunPower. It was mentioned that SunPower was maybe not the best investment that Total has made, but we learned from our mistake. We identified very quickly, at least in 2016 when we were counting our strength, that SunPower had a high-performance product, maybe the highest performance worldwide. But clearly, we had not the lowest cost and mainly for a question of scale. The scale in manufacturing businesses, such as solar sales and solar panel, is coming from large market, such as China and a very a good know-how of low-cost manufacturing such as the Chinese are able to develop.

So, we identified that the future of SunPower and on the manufacturing side decided to go through a partnership with Chinese company. This is what was achieved and we announced recently this month, a Spin-off of Maxeon Solar Technology, which is a manufacturing arm with a partnership with TZS, which was one of the well know partners of SunPower and one of the leading wafer manufacturing for solar wafers.

So TZS has taken 29% shareholding, injecting $300 million inside Maxeon. And new SunPower, the remaining SunPower, will focus only on distributed generation and storage markets, having the freedom to source best panels, the cheapest panel if it is of its interest. We think that it is a good promise for future successes for both companies. We saw that the stock market has recognized that we realized a significant value creation through the spin-off.

Wind offshore. As you might have seen, we were a bit shy on this technology that we knew. But we were considering for years that it was a too costly technology. You have to remember that no later than 2018, there were still some PPAs that we negotiated with a public authority on the basis of prices much higher than EUR 100 per megawatt hour. Then, through the contract that we had with the contractors that are the same than the one that we use in oil and gas, we started to understand that there was a significant cost reduction happening.

We decided to partner first with Orsted, the world leader. We did partner with them in order to bid on the tender Dunkirk in France, that we lost, but we learned a lot from having our teams discussing and working shoulder to shoulder with Orsted. When you want to learn, you better partner with the best one in the industry. That's what we did. Yes, we lost the tender because we are unwilling to compromise on the profitability. But we realized that we were able to make a profitable bid for us at less than EUR 50 per
megawatt hour. So, we are definitely convinced that this technology has a future. We looked since then at different opportunities.

The first one that we can announce as a real first big step is the Seagreen project, where we have acquired a majority stake, 51%. We have a nice partner, SSE, which is also one of the leading developers of wind offshore project in the North Sea. This project is already under construction. This is a project where we have the exception, only 70% is covered by PPA. But we have some ideas, and there will be some auction next year that could allow us to secure a bit more and allow us to derisk even more the project. But on this basis, we are already satisfied with the economics as we see them. And there is an opportunity to develop 400 megawatts beyond that could be also at a nice level of profitability.

As Patrick mentioned, the new frontier in wind offshore is in floating offshore because the fixed bed projects are limited, more or less, to a 60-meter water depth. In the North Sea there is a lot of area to develop those projects. But outside of the North Sea, most of the time, we are very limited in term of surface, if we can only use project that need less than 60-meter water depth.

Floating is the new concept that is being developed. It can unlock fantastic development for the technology. Of course, today, it's more expensive than the fixed bed but there is a strong willingness of many countries to offer PPA in order to meet the profitability requirement that we have and allow to secure the development of a first project on a profitable basis. We have already 2 significant projects. There will be another one that we'll announce later in October. But we have already 400 megawatts of project in the U.K., and we have announced also partnerships with Macquarie with a portfolio of lot of projects in South Korea.

Of course, the challenge is to reduce the cost we intend every day to leverage the competencies that we have developed in oil and gas, because this will be more or less the same technologies. We need, of course, to work in order to industrialize the best technology and to lower the cost. We have started already. We have a team that is working on this subject with a budget of $20 million per year.

This is the result of our ambition, the 35 gigawatt that we ambition to have in operation because we have a pipeline to go beyond. Double-digit return, for sure. Very low risk, nearly 100%, as we mentioned, secured by PPA with first-line companies or with public authorities. With this ambition, I think we will be among the 5 global leaders of this industry.

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**Ladislas Paszkiewicz TOTAL SE - SVP of IR**

All right. Well, thank you very much, Philippe. So if you have questions for Philippe, keep them for now. There will be the Q&A session at the end.

But now we have the last Zoom focused on the mobility revolution. It will be made of 2 parts, but to introduce this Zoom, I hand over to Helle.
Helle Kristoffersen TOTAL SE - President of Strategy & Innovation
Thank you, Ladislas, and good afternoon, everyone. As a way of a quick introduction on the revolution that is taking place in the mobility sector, I have one chart from our energy outlook that we presented yesterday.

Here it is. What you can see here is the actual fuel mix of the worldwide transport sector expressed in million barrels equivalent per day in 2018 to the left; and then moving over to the right, the evolution in 2030 and 2050 in our 2 scenarios: Momentum and Rupture.

The colors on the bar chart to the further right, so Rupture, in 2050 tells the whole story. It shows how the fuel mix diversifies and how effectively we cannot achieve Net Zero for the transport sector without this massive change in the use of fuels.

To the far right, you have the different fuels. You see that some are still left, and that would be especially in emerging markets. But there is a strong penetration of biofuels and e-fuels or sustainable liquid fuels. Synthetic fuels is another name. Penetration also of natural gas, hydrogen and, of course, electrification, especially of passenger cars, but not only.

In the shorter term, which is the data you didn't have yesterday, between now and 2030, the takeaway is that electrification, biofuels and gases will be the best way to decarbonize transport. And this is effectively what you're going to hear about.

Now from first, Bernard, I believe, and then Alexis. Thank you.

Bernard Pinatel TOTAL SE - President of Refining & Chemicals
Thank you, Helle. Good afternoon. So; let's now turn to biofuels. What I intend to do in the next 20 minutes with Alexis together is to share with you our ambition on the biofuels market from the producer as well as from the marketer standpoint.

So, let's first turn to the market, the world biofuel market. You see it on this chart. What is, of course, obvious is that's a growing market. 2 million barrels a day today, 4% of global transportation fuels market. But we expect this part to double by 2030. And of course, as I explained, depending on the scenario, this part could even further double by 2050.

So why is it growing? It's pretty obvious. It's because biofuels reduce CO₂ emissions by more than 50% compared to their fossil counterparts. And the states have, of course, understood that this is a readily available solution to decarbonize transportation. So, states put in place CO₂ reduction targets supported by tax incentives. Practically, it means that given percentage of biofuels has to be incorporated into fossil fuels. These targets are meant to increase over time.

When you look at the 10 years ahead of us, in most countries, you see this target increasing. On top of it, you even see more states coming and joining, I would say, the trend by putting in place such mechanism,
the latest one being, for example, Canada, which intend to reduce their carbon intensity by 12% by 2030; or states in the U.S. like Oregon, New York or Washington. In a nutshell, an attractive market from a growth standpoint.

How do we intend to catch this growth? What is our strategy? Our strategy has been designed along 2 pillars. From a producer standpoint, which is the perspective of Refining & Chemical. Our strategy is to grow in renewable diesel, the most attractive part of the biofuels market. I will come back on this one. And as a marketer, of course, which is the perspective of Marketing & Services, the strategy is to grow the share of biofuels distributed through our retail network.

And I leave the floor now to Alexis, who will elaborate on this one.

Ahmed Ben Salem ODDO BHF Corporate & Markets, Research Division - Oil and Gas Analyst
Thank you, Bernard. Indeed, our ambition in biofuels is to grow our sales very significantly, as you can see. We are looking at growth, both in Europe and in the rest of the world.

In Europe, we are currently the largest biofuel retailer. Indeed, the Green Deal that was just announced will translate higher incorporation mandates. HVO will come into the equation, especially with the trucking segment. HVO has a great interest for the companies who want to decrease their Scope 1 and Scope 2 emissions without having to change their trucks. So, the combination of both will allow us to continue developing our biofuel mix in this continent.

But we go beyond that. As an example, we are actively promoting e85. That means 85% of ethanol in gasoline in our retail network in France. We doubled the number of stations offering e85 between 2018 and 2019 and we continue expanding our network as the demand is clearly there.

Beyond Europe, we have identified a few markets where we want to grow. One of them is Brazil, which is the second largest biofuel market in the world, with 1/3 of the sales there being biofuels already. In 2019, we acquired a network of 300 stations. This was the first step as our target is to have more than 1,000 stations in Brazil by 2025.

We are also anticipating developments in the aviation business, but Bernard will elaborate on that in a few moments. So, you see biofuel will represent between 10% and 15% of our sales in 2030. This is what it takes to meet the 2 key objectives of the group of reducing the carbon intensity of our sales and decreasing the absolute Scope 3 emissions by 2030.

Over to you, Bernard.

Bernard Pinatel TOTAL SE - President of Refining & Chemicals
Thank you, Alexis. Now let's turn to renewable diesel. I just said that this is what we want to focus on as a producer in Refining & Chemical, and let's try to see why. When you look at the biofuels market, typically, you have to split this market into 3 segments, which each have very different characteristic.
The very first one at the bottom is a pretty well-known segment, the biogasoline. It's the largest one. There you incorporate bioethanol made out of sugar. The second segment is the biodiesel segment, where you incorporate biocomponent made out of vegetable oil, typically rapeseed oil, corn, soybean. These biocomponents are called ester fame, but they have a drawback. They contain oxygen, and that limits, from a technical standpoint, their incorporation rate into the engine. There is what you call a blending cap or blending wall above a certain volume, typically 7%. You risk to damage the engine. You understand that it puts a cap on the growth potential.

These 2 first segments have many points in common. They have low-entry barriers. They are not very capital-intensive. The technology is pretty well known. As a consequence, they are largely oversupplied and margins are poor. So, this is, of course, not the kind of market you like to compete in when you are a producer.

The third segment at the top is the renewable diesel segment. It's also a biocomponent for the diesel market. It's also produced from vegetable oil, but this time, with a different technology called hydrogenation. The beauty of this process is that you can rid of the oxygen into your biocomponent. All of a sudden, you understand that there is no incorporation limit anymore. This is what we call a drop-in solution. In theory, you can even replace/substitute 100% of your fossil fuels by this renewable diesel.

This is a high-quality grade, but barriers to entry are higher than for the 2 other segments. It's more capital-intensive. It's growing from that standpoint. It's an attractive market, a high-margin market and typically the kind of market you want to play in.

The last comment, as Alexis mentioned, renewable diesel that can be used for airlines. That's not the case of the 2 other segments. As you know, air transportation today faces a huge challenge in terms of CO₂ emission reduction, which means that there is an additional growth potential for renewable diesel. This is what I would like to show you now in more detail.

So, air transport. The equation is very simple. You see there, this industry emitted last year around 1 billion ton of CO₂. Airlines have made the commitment to reduce their CO₂ emissions by 50% by 2050. But at the same time, they know that the passenger traffic will double during this period of time. So, it looks like a tricky equation to solve.

So how do we address this challenge? First, of course, airlines try to reduce the weight of their airplanes by putting more lightweight material. They also try to optimize their flight plans to reduce the fuel consumption. But the main lever is, of course, around the fuel itself. Today, liquid fuels are hard to substitute for long-haul flights. We know it. Thanks to this premium quality, the renewable diesel is the only available solution offered today to airlines to reduce their CO₂ emissions.

You understand this is a brand-new market, and the states have understood it. You see now countries like Norway, France, The Netherlands, Sweden, tomorrow, Europe and probably the U.S., putting in place
incorporation targets, exactly as they did for the road transportation. We have in front of us a brand-new nascent market, which will also fuel the growth of biofuels and notably renewable diesel.

We have looked at the demand side. It's pretty attractive. Let's now have a look at the supply side. You have here the balance between supply and demand for renewable diesel. What is clear on the chart is that there is a need for additional capacities to meet the demand. Today, the market is short of capacities, and we think it will stay that way for the years to come.

Why is that? It's very simple. When you think about where the new capacities might come from, of course, you think about retrofitting existing refineries, exactly what we did with La Mède or what we're about to do with group fleet close to Paris. But the typical lead time is 3 to 4 years between the moment where you make the announcement and the moment where you have your first production. On top of it, we don't see many new greenfield projects.

Last comment, there are also not so many projects in Europe and it's hard to some extent because we consider that Europe is at the forefront in terms of energy transition and carbon neutrality. So, there is an opportunity, clearly, for European refiners and, of course, for Total. In a nutshell, if I had to summarize, the market will stay tight. Of course, that will support margins for the years to come.

What is our strategy in this field to catch this potential, this opportunity? We have designed a strategy build along 3 pillars. I'm going to detail each of them. The first one, of course, is to convert existing assets. That's particularly true for Europe, where we need to adapt our refining system. We have done it with La Mède. You know it. It has been our first step. We are not doing it with Grandpuits. I will come back to it in more details in a few minutes. So that's the first pillar we execute.

The second one, of course, is to increase the share of co-processing in our existing refinering system. So we take the existing assets with some marginal Capex, mainly some logistic Capex, to segregate vegetable, oils from crude. We produce renewable diesel. It's done at a marginal cost because typically, opex are very low. You see there that we have plans to grow this part by 300,000 tons in Europe in the next 2 to 3 years. And we're also looking at opportunities in the U.S.

The last pillar, of course, is to develop new units, additional production units on existing platforms where we can leverage existing synergies, typically, logistics synergies; or if you have an excess of hydrogen, typically, you can also leverage this excess hydrogen to produce renewable diesel. That's typically the project we're evaluating today in Korea. It's 0.5 million ton of capacity project on our platform in Daesan.

What you see clearly is that by leveraging our existing refinery setup, we are able to benefit from very low Capex in the range of $500 to $750 per ton as you see. And this has to be compared with greenfield projects, which range more in the area of $1,000-plus per ton. So, it's very attractive from the Capex intensity standpoint.

Also, and I will come back on this because it's also critical, we design our investments in a way to be able
to process all type of feedstock as flexibility is key in this market. As Patrick explained, we are targeting more than 2 million tons of renewable diesel by 2025 and doubling against this volume and coming close to 5 million tons by 2030 with a cash flow generation in the current environment of $350 per ton.

I was mentioning feedstocks, which is a critical point, and I would like to tell you why. On this chart, you have the market split of the main feedstocks used for renewable diesel. On the left-hand side, the largest pool, very well known. These are all types of vegetable oils. It's a resource, which is largely available, and which will remain largely available for the future even after the Pan Ban.

In the middle, you have a growing category called waste and residues, so typically animal fat or used cooking oil. There is a great demand for this category with some tax incentives because this category contributes to the secular economy, and it's supported by the government and the states. The challenge there, of course, is to increase the collection rate to meet the increasing demand, 25 million tons today, which is already significant, and we expect this category to grow in the decade to come.

The last category on the right-hand side is called advanced. It's the next generation, but not really available today. We see it more playing a role by 2030. As you see, there are plenty of different feedstocks to play with. Of course, it depends on the price because the prices are pretty volatile, depending, once again, on the feedstocks. You have to play with the legislation. As I just said, for example, palm oil is banned in France. Animal fat is banned in Germany. So, depending on the legislation, you have a different mix to play with.

And of course, you have to play with the tax mechanism. I was mentioning waste and residues, which in some cases benefit from tax incentives. So, you understand why it's so critical to be able to play with all the state, all the panel, all these feedstocks. And that's why it's so critical to design your units to be able to process all type of feedstock. And this is exactly what we have done. You see it in La Mède and two more in Grandpuits.

In La Mede, so far, we have been able to process successfully 8 different types of feedstocks. We have designed our units to be able to pretreat these feedstocks, to also be able to segregate between the different types of oil and feedstocks or finished goods. Of course, we leverage the expertise of trading to be able, once again, to get access to the best sources of certified feedstocks.

Particularly, what have we done and what do we intend to do? The very first move we made, you know it was with La Mède. It started up last year, mid of 2019. This has been our first move. We have applied there our business model, which is, once again, to retrofit existing assets to benefit from low Capex. And you see here that the Capex intensity of La Mède was around $600 per ton, to be compared once again with the metrics of the greenfield project, which is more in the region of 1,000 tons plus per ton. It has been designed, I've already said it, to be able to process all type of feedstocks.

Today, we are in the ramp-up phase. 300,000 tons of production, this is what we expect to do by the end of the year, delivering a positive cash flow from operations above $350 per ton. I would say the first step
is a successful one. Of course, we are now leveraging this experience to move to our next project, which is Grandpuits, close to Paris. That will be our very first 0 crude or 0 oil platform entirely dedicated to bio-based fuels and polymers as well as to plastic recycling. This represent an investment of more than $500 million of Capex. A good internal rate of return, you see there, more than 15%. We have there, if I just described briefly, the different projects, the biorefinery, which will process 400,000 tons of feedstocks, 70% being waste and residue, with half of it being secured. This unit will be largely dedicated to the production of biojet. Sustainable airline fuels, that will be the main outlet of this biorefinery and with some renewable diesel, of course, starting up in 2024.

We have also a brand-new bioplastic unit, producing PLA. PLA is a biopolymer made out of sugar. We have, as you know, a very successful partnership with Corbion. We invested 2 years ago in a plant in Thailand, 100,000 tons. This plant has been ramping up very well, and we have taken the decision to double the capacity of this joint venture and to locate this new unit in Grandpuits with again a start-up phase by 2024.

The third project is a plastic recycling unit. It’s a chemical recycling unit. It’s the first in France. It’s going to be a joint venture as well with a company called Plastic Energy, and we are targeting a start-up in 2023.

And we have, last but not least, a solar farm, 15 megawatts of capacity, which will contribute, as Philippe explained, to the generation of green electricity for the European asset of the group.

As a conclusion, you will remember that our strategy is built along 2 pillars: a leading producer, a leading marketer. Producer, we want to grow our production in renewable diesel, becoming a leader in this field. And in the field of biofuels, as Alexis explained, we want to grow our share of biofuels within our liquid fuels by 2030 to a level which will represent 10% to 15% of our sales and which will also contribute to reducing the carbon intensity of our sales.

Thank you. I give the floor to Alexis now.

Alexis Vovk TOTAL SE - President of Marketing & Services

Thank you, Bernard. For the next 20 minutes, together with Philippe, I will present our third and last focus on how Total is embracing the electric mobility revolution.

I will start by stating the obvious: mobility is about to change drastically. It has already started, albeit slowly, but the change will be major in the coming decades due to the exponential penetration of the electric vehicle.

In the Total Energy Outlook that was presented to you yesterday, in the Momentum one, the share of electric vehicles will reach close to 60% of the fleet by 2050. In the Rupture scenario, the increase is even faster as the percentage will be close to 75% of the world fleet in 2015.

In Western Europe, and we are presenting here on the right the 5 markets where Total has a strong footprint, the number of vehicles on the road will be more or less stable at around 100 million vehicles.
But the switch to electric mobility will be faster than the worldwide average. You can see that the share of electric vehicles will still be modest in 5 years in 2025 at less than 5% but will grow significantly to reach almost 20% in 2030 and close to 95% by 2050, thanks to the impact given by the Green deal.

This acceleration is no science fiction and is being fueled by 3 main drivers. First and foremost, regulations. Regulations are the main market driver, and they take place at various levels in economic zones, in countries and in cities. There are many examples beyond the long-term political objectives of carbon neutrality announced by Europe and China recently.

There is, for example, the emission target of 95 grams of CO₂ per kilometer that has been set on vehicles sold in the Europe since this year. There is the banning of the internal combustion engine by many countries in the next 1 or 2 decades. There is the introduction of Zero ultra-low-emission zone in city centers as London and Amsterdam have already done.

Car manufacturers have reacted to these regulations and have started to invest massively in EV. They have clearly chosen electricity as the next technology, and this is the second major market driver.

Finally, performance of batteries is rapidly increasing, while costs are decreasing. This is the third market driver as it allows us to foresee, one, cheaper cars; the cost of the battery currently represents still 40% of the cost of the car; and two, extended autonomy. These are the 2 main points preventing customers from switching massively to EV right now.

The mobility world is changing. At Total, we have integrated that in our strategy. In mobility and EV charging, and I will come back to that in a few moment. Our strategy will be to address the most mature and attractive markets in terms of size and to leverage our position. We are quite excited as we really do believe this represent a fantastic business opportunity for Total.

I just mentioned how batteries are a key driver to this market and a key element of the value chain. And Philippe will now explain how Total is addressing this marketing opportunity by developing key position in battery manufacturing.

Over to you, Philippe.

**Philippe Sauquet TOTAL SE - President of Gas, Renewables & Power**

Thank you, Alexis. So, first slide, you have to remember that when we invested in Saft. The strategy was, in fact, to develop what we call Energy Stationary Services. So, battery needs to compensate for renewable production intermittency, peak shifting or frequency regulation. But to be profitable, and we learned once again from our mistake with SunPower, we were willing to get low-cost manufacturing basis. Of course, this was implying to go to China and also to take interest in mobility because the lithium-ion battery needed for ESS are more or less the same chemical family as the one for mobility.

After having discussed with different partners in China, we decided to partner with Tianneng
headquartered near Shanghai. They are the #1 worldwide of the lead battery for vehicle. This business is not part of the venture, but they were eager to develop lithium ion. We have already built a Giga factory, a large factory, but which was not completely filled. We decided to partner with them. We created the joint venture, 60-40, in 2019.

Saft is contributing clearly mainly to its lithium-ion chemistry and know-how, and Tianneng is contributing with, first, its Giga factory, an existing one. It's also contributing with its sales channels in China because on this basis, we can develop, produce cheaply products for our ESS business outside of China. And we can also develop business for mobility in China where we are leveraging also their sales network.

Today, we are already the leader in China with close to 30% market share of the e-bike segment, which is one of the highest growth segments in e-mobility. When I say e-bike, it's not only bicycles, it's also the motorcycles. So, this is our investment in China.

We are not limiting our mission to China. We also had an opportunity when Europe decided to really adopt a very clear policy to promote and to impose the development of electric cars. We had the opportunity to discuss the possibility of building manufacturing capability for battery for electric vehicles in Europe. The risk for Europe was, of course, to import batteries from China one day and in the future to import the vehicles.

We had a discussion with a very strong partner, PSA, one of the leading manufacturers in Europe, maybe the most profitable now, and we decided to partner with PSA 50-50 today to develop this automotive sales company. We created the company in early August. The objective around the treaty is to get up to an equivalent of 1 million EV, so that means more or less 10% of the European market. We'll go step by step. Clearly, the first step is an R&D step, which has already started since August. Total reinvestment is limited to EUR 500 million equity injection, knowing that we have significant subsidies but have already been granted by France and Germany on this project.

Alexis Vovk TOTAL SE - President of Marketing & Services

Thank you, Philippe. I'm going to share with you now how we are addressing the EV charging market. EV will completely reshuffle the distribution of energy to motorists. Today, customers come to our service station to refuel, and they usually do so while on the move. With EV, it is a different ballgame. The car will charge when it is not in use, when it is parked, which is most of the time. It will bring multiple charging opportunities compared to today.

In Europe, market research foresees that approximately 40% of charging will occur at home, 40% at the workplace, 15% in the public domain and about 5% at service stations. This means that we have to reinvent the way we interact with our customers. We have to switch to a multichannel distribution model. We won’t wait for customers to come to our sites anymore, and we need to provide them with charging services wherever they choose.

To address this new paradigm, we will focus on our strength, and two of those are our experience in
offering services and our ability to manage infrastructure. This is why our primary focus will be on the B2B and the B2G segments. We will leverage our relationship with our professional B2B customers, in particular for charging at work and while they are on the move at our service stations. In a moment, I will show to you a few examples of our ability to install and operate charging points in the public domain. The public domain is what we call B2G. We will obviously reach B2Cs through public points and service station, but B2C and home charging is not our foremost priority unless, for instance, where Total can also be the electricity provider as increased consumption there may make it worthwhile.

There are various business models and position along the value chain. Because we are focusing on B2B and B2G and retail, the first customers we’re dealing with are cities and companies. The vast majority will want a single point of contact throughout the chain, providing the installation of the hardware, the operation, the maintenance and obviously the charging services with energy sales and associated services. Our business model to seize this new business opportunity is to be what we call a charge point operator, capturing the bulk of the value chain. We sell the energy and the charging services, and we develop direct customer relationships. But for convenience, our customers will want to have the capacity to access a larger number of charge point beyond the ones operated by Total. Total mobility solutions will also allow charging at third-party charge points. In this way, we can retain the relationship with our customers end-to-end. Lastly, in certain markets, Total can integrate upstream by providing the electricity as well as the operation of the charging point, allowing us to capture more of the value.

Our strategy is first to address a market where we are strong and where the infrastructure needs to grow rapidly. That is Western Europe. In our main European markets, the number of charge point will grow significantly by 2025. We estimate that 3 million charging points will be installed in Europe in the next 5 years, but 40% of them or 1.2 million will be installed by corporate customers and by cities we want to equip the public domain. In this context, our strategy is to prioritize urban markets, first, by taking position through public concession in large cities, then by installing fast chargers in over 200 major urban hubs targeting high mileage urban professional. Obviously, the perfect complement is then to connect those urban areas. This will be done by installing superfast chargers to 300 of our service stations along the main road corridors over Europe.

In line with the objective of reducing emissions, cities are rapidly installing EV charging infrastructure. Total intends to partner with major cities through concessions to foster e-mobilities. We already have 2 iconic examples. First, earlier this year, we were awarded the concession of the Metropole Region of Amsterdam. We already operate 5,000 charge points there and could go up to 20,000 by 2024. Since Amsterdam is a dense urban area with limited individual parking, we foresee a high usage rate, which explain why such business can bring a favorable equity return above 15%.

Second, we are not relying only on organic growth. M&A is part of our growth plan. London is a dynamic market in terms of EV adoption as it has set the ambition to become a zero-carbon city in 2050. I’m very happy to announce that in line with our strategy, last week, we signed the acquisition of Bluepoint London, leader of EV charging in London with around 50% market share and long-term contract with 23 borrowers. There are already 1,600 operated charge points, and we are planning up to 4,000 by 2025.
Amsterdam and London are great examples. Altogether, today, we have already 12,000 charge points in operation in various cities in Europe. And with the coming growth that I have just outlined, we are well on track to reach our target of 50,000 operated charge points in the B2G segment by 2025.

In urban areas, we also have to cater for the fast charging needs of certain professionals who are doing high mileage on a daily basis, in particular taxis, ride-hailing cars but also last mile delivery vehicles. These professionals will need dedicated high-speed EV charging stations. This gives a great opportunity for the creation of charging hubs offering multiple charging points. You can see a picture on the left of our first one that is already up and running. Charging hubs are now being deployed in urban nodes to cover major cities in Western Europe, and we target to have more than 200 sites in the next 5 years.

For long distance traveling on the right, the issue of autonomy will remain the point of attention for some time. The solution here lies with high-power charging or what we call Superchargers up to 350 kilowatts. They have the capacity to deliver 100 kilometers of autonomy in 6 minutes. Here, Total has a very valuable asset with our existing retail network of more than 6,500 stations across Europe to choose from for providing this service. Our goal is to deploy 300 high-power charging sites along highways by 2022. This means one every 150 kilometers on main road corridors. By developing this network, we will offer our EV customers the possibility to travel with the customer experience, close to the one that we are experiencing today. Obviously, as a side comment and taking into account the average amount of time necessary to recharge, our customers will enjoy our well-established convenience services also.

So, whether on highways or on urban charging hubs, our target is to install 1,500 fast and superfast chargers in 500 locations by 2025. This represents a commitment of around $200 million and a projected IRR of 10%.

The last segment I would like to present is the B2B segment. We have a fantastic asset with our existing 1 million client base and the full potential to accompany them in their transition to cleaner mobility. In Europe, we have 3 million Total fleet cardholders, already mobility clients of Total, who will be interested in EV charging offer. This is a solid base to leverage, keeping in mind that B2B fleet conversion to EV is supported by legal constraints by the Net Zero ambition of our client themselves and by the fact that certain zone will not be accessible with conventional fuels. So, we anticipate the B2B segment will move fast, and the potential in Europe is over 1 million charge points for B2B by 2025. This move is already happening. And on the slide, we can see a few examples of our success.

Enedis, who is the major grid operator in France, is a very good reference. They have actually one of the largest EV fleets, and we have installed 1,250 charging points, over 155 of their sites for their fleet. Our B2B customers may want to use the charging services that we operate on their premises, not only for their fleet, but also for their clients, their employees, their visitors. This is what we call the host segment. It is what we have done for Peugeot, where we have installed 175 charge points at 14 sites in 6 countries. It is the same principle for a shopping center who would want to provide charging services at their parking spaces.
Last, an example of how we leverage the long-term relationship with our customers is what we have done thanks to our lubricant business. Within the last year, we have worked with more than 500 OEM dealers and garages across Europe to equip them with over 2,500 charge points. Putting all this together, our target to operate 100 charge points in the B2B segment by 2025 is quite realistic.

The next 5 years will be key to position Total well. This position is important because after this, taking into account the market development dynamics that I highlighted at the beginning, the pace will accelerate drastically. Building on our strength and our competitive advantage, we will reach a 10% market share in the B2G and B2B segment in Western Europe. Total is committing the necessary resources to make this plan happen, and we'll allocate $300 million of Capex and $300 million of assets under leasing over the next 5 years. We are not starting from zero. We already have a head start with the 18,000 charge points that we already operate and a significant number in our portfolio. This positions us very well to reach our target of operating 150,000 charge points by 2025, which will deliver 500 gigawatt hour. This business will bring an additional $50 million of cash flow from operations to Marketing & Services by 2025 and around $100 million by 2030, thanks to a forecasted increase in usage rate. We will, therefore, be a major e-mobility player in Europe.

I've spoken about Europe because that is where Total and EV growth are strong. However, EV charging is advancing a space in China. Total has a presence in this country with strong position in 3 regions. As you can see with this picture of our first charging hub in Wuhan in Hubei in partnership with Didi, we are also on the move there. So clearly, more to come from Total on EV charge, for sure.

Thank you for your attention, and I think we can move to the Q&A.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Thank you, Alexis, for this presentation about the e-mobility and to Bernard for the biofuels and Philippe on renewables. So, I think we are back for a session of 45 minutes until 6:30 p.m. There were some question left for the first session. We should give priority to you and then if you can take more questions. So, the floor is yours.

Operator
Your first question comes from the line of Christyan Malek from JPMorgan.

Christyan Fawzi Malek JPMorgan Chase & Co, Research Division - MD and Head of the EMEA Oil & Gas Equity Research
Patrick and team, thank you for the mission as I appreciate the delicate balance to sustain oil as your core business and then building LNG at the same time. I didn't submit question the last time. If I may, I have 3.

My first question relates the flex you have with capital allocation in oil versus electrons in what could be an upward trend for prices. How tempted would you be to invest in more short-cycle projects in a higher oil price environment at the cost of delaying your sort of elevated power target 25 or 35 gigawatts? And I
know it's a tough trade-off, but how would you prioritize that in capital frame?

And then linked to that question, forgive me for being a bit more optimistic about the macro environment in the medium term, but in a year of excess free cash flow and where debt has deleveraged fast at 20%, I just want to be clear, would you consider increasing your dividend payout? And how should we think about buyback versus dividend priority?

Thirdly and final question is I think it's very bold to provide explicit CFFO targets for renewables business in 2025. And thank you for more granularity than we'd expected. A lot of debate we've had around growth in renewables by all companies where this will ever be valued appropriately by the equity market. Would you consider doing what the utilities company didn't carve out for IPO, the effective utility part of your business as a separate entity? I guess that would be a great dessert to finish off this great new menu.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
I caught perfectly the last 2 questions, but not the first one because the sound here was not very good. I'm not sure to have understood.

Christyan, your question was arbitration between Capex to electrons and oil and gas, if I understand.

Christyan Fawzi Malek JPMorgan Chase & Co, Research Division - MD and Head of the EMEA Oil & Gas Equity Research
Yes, exactly. So essentially, how you think about allocating more Capex towards short cycle in a high oil price environment and does that come at the cost of delaying your new power targets? What's the trade-off in a cycle environment and the capital frame?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
The answer for me is clear. The short-cycle Capex, we allocate them depending on the payback on the oil price. So, if we are back at $50, $60 and we have more cash, we could decide to accelerate this short cycle. It will not be done on the detrimental part of the low carbon electricity because again, in all the scenarios we have decided that we'll put the $2 billion we need for the next few years and then we'll increase it progressively. I see that as an additional opportunity to deliver more cash from oil and gas and maybe feeding then more to our low carbon electricity business with more opportunities if we can capture some. With the Capex allocation we propose, there is no antagonization.

Oil is still at the core of a company, and energy. So, don't make a mistake. We want to add a third part and to build it with a clear strategy, but it's not a matter of arbitrating to more electrons against oil. And again, short-term Capex can be activated. If we see a rebound, which is perfectly possible in the oil price, then it's a matter of mobilizing the rig.

You have noticed that this year, we have decided to remobilize the rig in Angola because, in fact, we saw a possibility to quickly get some high returns, which could be done immediately. There is a debate for another rig in Angola, we'll see if that's true, but we have to monitor that according also to the
environment that we face today.

The second one: I will tell you we know that our investors prefer dividends to buybacks and our Board is clearly more in favor of dividend than buybacks. Having said that, we also have the remark of Michele previously during the discussion and it's a matter for me of level of the shares. This is why I don't want to belittle it. It's clear that the Board is waiting to see the stock rerating. If we remain at 9% of returns, there will be a question mark that it would be strange for us to increase the dividend and not to allocate additional cash flow to buybacks, which should be the priority. The answer is that we prefer dividend and our investors prefer dividend when we ask the question, but it's linked to the rerating of the shares. There are 3 angles: the share price, the dividend and the buybacks. Again, if we remain at a very high yield of 8%, 9%, there is a certain logic to allocate additional cash flow in priority to buybacks.

When we propose the strategy, which is more aggressive and to give clarity to this broad energy company, we convince investors. When we'll have these cash flows, we will have to make that arbitration. I gave you some insights of the discussions around the Board, but I have no problem to be transparent on that.

The last question, I think, Christyan, I answered it, I think, to one of your colleagues just before. It's a matter of size. Clearly, our objective today is that we are convinced that we can find investors to put money and to believe and to support this global energy company because, again, we have some financial strength and some financial potential capacities to invest in these renewables and electricity business, but many of our competitors in the utility do not have. In fact, I see the reactions. The more we are expressing the targets and we are acquiring assets and we move forward, the more we are a little afraid by looking to see these big oil and gas companies, the cash flows entering into that market.

Then it's a matter, again, linked to shares. Can we convince investors? Can we rerate the Total shares and will they accept this business model or not? We need, I'd say, 5 years. If not, in the meantime, we will have built a sort of beautiful renewable portfolio. But it's not a priority today. The priority is to establish it because I think for the long term and if we are all serious about bringing climate change solutions, our companies having the source of cash flows from oil and gas and redirecting it is the best way to accelerate solutions for the climate change challenge.

Operator
Our next question comes from the line of Alastair Syme from Citi.

Alastair Roderick Syme Citigroup Inc. Exchange Research - Research Analyst
Two questions. Can you do everything you think you need to do in refining through adoption? I was struck in Helle's presentation yesterday that suggested under the European green deal that oil demand might be as little as 1 million to 2 million barrels a day by 2050.

And then secondly, I wonder if you could just touch on the cost estimations you think for floating wind versus fixed base. What's the level of difference? And what are you building in terms of cost reductions into your project economics in Korea and the U.K.?
Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Yes, Philippe will take the second question. On the first one, just to tell you, we speak about 2050, we are still in 2020. Total clearly has a clear strategy of progressively adapting our refining system in Europe. We have begun, I think, 10 years ago. We shut down the Dunkirk refinery and then we went to La Mède to convert it. Now we do it with Grandpuits. I think it’s a question of facing the reality and doing it progressively, trying to benefit from these biofuels markets, which are supported by European government policies. Frankly, it’s better to be among the firsts to do it rather than doing it among the lasts.

When you look at the remaining refineries which are in the portfolio of Bernard today, I think I would have been very happy to have the 6 remaining refineries in Antwerp, Leuna, Zeeland, Normandy, Donges and Feyzin, which are left in Europe, when I was the Head of Refining & Chemicals rather than the previous portfolio with many refineries and some of which unprofitable.

It's again a question of adapting progressively, but we will have to do it. Having said that, when you have a very profitable one like the Antwerp or Leuna or Normandy, there is no reason why not to maintain this activity. Bernard, you want to complement on that?

Bernard Pinatel TOTAL SE - President of Refining & Chemicals
No, no, it’s clear what you said.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Okay. Philippe?

Philippe Sauquet TOTAL SE - President of Gas, Renewables & Power
Today, the cost of floating is only based on the pilot that we are designing right now. But at the time when we speak, the cost in Capex per watt is around 6%. So it’s double the price of the cost of the fixed bed, knowing that, of course, what we anticipate is that there will be higher, stronger wind for the floating because more or less, the further you are from the coast, the more regular and the stronger the winds are, so you should have more production. It’s a new technology in its infancy, we should be able to have a higher size for the wind turbine, even beyond what we see today.

Currently, for instance, wind is based on 10 megawatts. We can imagine for floating, that will go maybe twice as much. But of course, all this technology has to be developed. In 5 years, we went in fixed bed from EUR 150 per megawatt hour to EUR 50. We have the same kind of challenge to face today in the floating.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
It’s a matter of supply chain, of mobilizing the people. This emerging technology is interesting for us. A country like Korea is offering a beautiful platform because you have a lot of yards there. Suppliers are working for the E&P and know a lot about floating platforms and the government is motivated. They have a clear policy in Korea. I’m convinced that this type of countries will help to emerge, at the beginning, to
give the right incentive, I would say, $200 per megawatt hour. This will emerge and then there will be an acceleration of this technology. I think it's the same process as the others, but there is a big potential.

Frankly, on this one, the oil and gas companies are perfectly positioned to be in the forefront. It's why, by the way, Macquarie, which had already these rights to make wind measurements in Korea has selected Total rather than a utility because they saw a clear interest to partner with us on this project. So yes, it's still costly, it's clear, but it's a matter now of engaging in industrial projects and not just pilots. Okay. Next question.

Operator
Your next question comes from the line of Biraj Borkhataria from RBC.

Biraj Borkhataria RBC Capital Markets, Research Division - Director, Co-Head of European Energy Research Team & Lead Analyst
I've got a couple of questions again on low carbon, but I just want to get a sense of the level of competition in that business. Over the last couple of years, could you say what proportion of solar and wind tenders that you entered that you didn't win? I just wanted to get some comfort around that.

And then the second question is on your low carbon cash flow target, the $1.5 billion in 2025. What is that number in 2020? I vaguely remember you're putting out a target of $1 billion in 2020 a few years ago, but I don't know if that's apples-to-apples. So, a clarification on that would be helpful.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
No, it's not the same at all. When we said that, it was mainly based on SunPower and expectations, which clearly have been disappointing. So today, the figure we gave you is a sum of many assets, so it's much more reliable that depending on 1 or 2 performance. We were maybe too optimistic by that time. So today, we are more in the field of $200 million, to be clear. So, it's emerging because all that is just being built.

Then the first question, how many tenders did you not win? I think we lost mainly in the Middle East in Saudi Arabia and Abu Dhabi. So, 2 big tenders on which we were competing. And frankly, they were very aggressive. And also in the wind offshore off Dunkirk. But again, I think these tenders are similar to the ones in E&P. You don’t make money when you win a tender, you make money because you have a better idea and you find direct negotiation. There are many, many players around the world, small players, which are, in fact, developing some pipelines and they do not have the financial capacity to build. And this is what we have done in Spain as a business model which was defined to you by Philippe. They have the local knowledge, they have the capacity to have access to connections and land, but they have no financial capacity. So, when we found them, they saw immediately the advantage of partnering or selling their pipeline. It's not for me M&A, but it's more an inorganic business development.

We have today this type of approach where we leverage our financial capacities and our capacity to find PPAs, corporate PPAs, which will be offered to them, to accelerate that development. But it's not very expensive. The way we remunerate them is by derisking the projects step after step. To be honest as well,
if a tender is too aggressive, we are not there just to make megawatts. It’s not a question of gigawatts per
gigawatts. It’s a question of at the end of metrics. We approve projects if we reach 10% of equity IRR after
farm down or we don’t approve. And so that’s clear that in one of the tenders, the team came back to us
and we said no because it was too low. On the Dunkirk offshore wind round in France with Orsted, we
were perfectly in agreement. But Orsted told us it was too low, I said stop immediately.

One of the differences in this tender is not really the cost, the Capex, et caetera, it's more the assumption
that you will take on the tail. If you take an assumption to be reasonable, you take the current price of EUR
40 per megawatt, and after 15 or 20 years, you have one approach to the bid. If you believe that the power
price will go up to EUR 70 or EUR 80 per megawatt, of course, you change your bid. This type of game for
me, it's a casino. I prefer not to put money in this type of game. This is exactly the type of game that some
players are playing today, which is just to take a very aggressive assumption on the long term. On the
contrary, we believe that the more you will have renewables in the system, the more it could imply some
lowering to the cost of electricity and energy. We are not ready to play that. Okay. Next question.

Operator
Your next question comes from the line of Henry Tarr from Berenberg.

Henry Michael Tarr Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst
Two, please. One on the renewable diesel business. I think you have a target of 70% per share of waste
and residues in terms of feedstock. And you say you've acquired, I think, or secured half of that now. What
type of feedstock have you secured so far? Would you see the need to vertically integrate into the
feedstock market? So, I guess we've seen a lot of companies announcing new renewable diesel capacity,
but it seems as though the pool of sort of waste and residues is limited.

And then my second question would be around how you view the economics of EV charging versus your
conventional sort of liquids marketing business and what the ultimate market size might be across electric
mobility versus that current sort of liquid fuels business. So, you're talking about $100 million of cash flow
from operations, additional from the electric business over the next 10 years. But ultimately, the current
liquids business is likely to come under pressure as EVs come through. So, any thoughts around that would
be great.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
On the first question, I would just preempt it a little because there are some commercial discussions. And
as you just said, there are quite a lot of competition for the feedstock, and so we have decided in
conjunction with one of our big partner and supplier not to reveal anything about it. First, some contracts
coming to us by 2024 could have some impact. I can't tell you, but it’s clearly something very important,
like I think Bernard told you. But I would say 40% of the 70% are warranted, but we cannot reveal anything
about it, respecting our commercial agreements. For me, as Bernard explained to you, it was fundamental
before taking the decision to invest. Bernard, do you have something else to add? Or maybe on the other
part, on the other 40% to cover? Where are you?
Bernard Pinatel TOTAL SE - President of Refining & Chemicals
Yes. I mean the rest will be, of course, covered by vegetable oil, mainly rapeseed oil coming from local area. So, it’s not so much an issue. Henry was making a comment that he thinks that the resources will be limited. What we showed basically is that there is 25 million tons today, and just half of it today is dedicated to biofuels. So after, it’s a matter of press point, of course, but there is still some room to further increase with the pool. And on top of it, as we see, thanks to the collection rate increasing, we see this pool increasing as well over time. Securing now is key, but they will be more to come, I think, in the next 10 years as well.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
EV, so Alexis, this one.

Alexis Vovk TOTAL SE - President of Marketing & Services
Thank you, Henry, for your question. I think there is no doubt that today, the EV profitability metrics are not as dynamic as the conventional business. If you look at the average return of Marketing & Services, it's over 20%. It's normal because it's a mature business, whereas EV is starting. We are a bit as we are explaining in the renewable business. We target above 10%. I think it's important for us to start this process, to take position, as I said in my speech. The next 5 years are key because the pace will accelerate after. It's important that we take position, which are profitable, above 10%, and the returns will come after.

After that, in term of strategy, my presentation was on purpose focused on Europe because this is where it's happening. But Total is an international company, present in various continents, and I think our portfolio management of activities with the different maturity of fuel versus EV allows us to stay quite profitable and deliver cash flow from operation growing for the next 10 years.

Operator
Your next question comes from the line of Paul Cheng from Scotiabank.

Paul Cheng Scotiabank Global Banking and Markets, Research Division - Analyst
Two questions, please. First, Patrick, based on your current business plan, when you believe you will reach the economy of scale, where the low carbon power business will be cash flow breakeven and when you would be cash flow positive? And what is that economy of scale? And a similar question is on the e-mobility investment. When that do you think you will reach the cash flow breakeven?

And also, whether that you would consider and when in the quarter, you will break out the low carbon power generation business as an individual segment and provide the full financial impact of that so we will be able to do a better job in understanding and evaluating that.

The second question is on the post 2025. Your game plan seems to suggest you expect an acceleration in the energy transition. So, from that standpoint, how should we look at your percent of your Capex shift,
whether that you’re still talking about 85% in the legacy business and 15% in the low carbon power business or that, that is going to shift quite significantly.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
I’m trying to catch the last question because...

Paul Cheng Scotiabank Global Banking and Markets, Research Division - Analyst
Last question is in your business plan, you seem to suggest post 2025, we will see an acceleration in the energy transition. So, how that is going to impact on your capital allocation? Are we still going to see 15% in the low carbon power business and 85% in the legacy oil and gas business? Or that percentage, that ratio will change dramatically?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Not dramatically, but what we mentioned in the presentation is that we think that we’ll go up to 20% and a little more. We say more than 20%, but let’s say 20% by the second half of the decade. So, it's 15% for the coming 5 years and then 20%. So, it's not dramatic. As long as we can maintain this, I would say, light capital model that pays again on the idea of low interest rate, there is no dramatic change in that picture because it's related also to your first question and we want to deliver one day net positive cash flow. And in fact, the more we invest, the more we generate cash flow. I think the net cash flow positive will appear in the second part of the decade. I don't have a precise model to tell you, but the second part of the decade. Okay.

Paul Cheng Scotiabank Global Banking and Markets, Research Division - Analyst
And whether the company will consider to change the reportings and break down in the low carbon business into an individual segment and provide perhaps that’s a full P&L so that we can do a better job in understanding and evaluating it.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
I think we will give you more and more information about it, but the structure has already changed. We have provided you quarterly results since the first quarter with more and more clarity on it. The organization we have with gas, renewables and power has some value because it's in the integration in gas and power. I don't intend to change the organization of the company. We like the reporting to be in line with our own organization in terms of internal accountability.

I think today that it's premature because it must be material, and there is a question of materiality to all that. But between today and 2025, for sure, there will be some change in the reporting. But what I can ensure is that you will be able to have some metrics, which will allow you to better see the growth of it and the development of this business in terms of capacity, in terms of productions. So, we will organize the reporting because our intent is to be attractive to the market. We’ll give the figures, which will allow you to compare what we do within Total with companies which are in the renewables and power business.

Operator
Your next question comes from the line of Jason Kenney from Santander.

**Jason S. Kenney** *Grupo Santander, Research Division - Head of European Oil and Gas Equity Research*

Actually, just a point of clarification, if I may. On the Total Eren option, I think you can take 100% stake from 2023 versus 29% stake to date. Do all of your renewable power targets include 100% stake by 2025 or a 29% stake. In either way, what contribution or what is needed to take that 100% stake in 2023?

**Patrick Pouyanné** *TOTAL SE - Chairman, CEO & President*

We have 2 scenarios. And at the end, it’s neither one nor the other. So, it’s neither 100% nor 29%. But again, this will have to be evaluated. I don’t want to preempt this question because the world is changing very quickly. We have also the option to IPO Total Eren. We are considering it, I would say. In our figures, it’s not 100%. The way we have taken all that is that we did not take 100% of all the projects in the pipeline. Okay.

**Operator**

Your next question comes from the line of [unidentified analyst].

**Unidentified Analyst**

When I look at the last 10 years, Total outperform the 2 closest peers, BP and Shell by more than 50% of total shareholder returns despite the share price being like 20% below. Of course, most of this return was achieved through a growing dividend. My question to you is that, what can change in the next 10 years that you’ll not continue to outperform your peers?

And my second question is, last, and correct me if I’m wrong. When you had the biggest portion of renewables, the utility companies that’s actually an independent companies, they are able to grow much faster than the ones that would come to mind. Of course, EDF Energies Nouvelles that you mentioned in your presentation, but also the Iberdrolas, the Enels, the renewables versus the German that haven't done it and so in terms of that growth. I mean do you think that by having a listed entity, you actually can grow much faster in terms of your renewal ambition?

**Patrick Pouyanné** *TOTAL SE - Chairman, CEO & President*

No. I don't think there is a link between being a listed company and the rate of growth. It's a matter of capital allocation. Having expressed the strategy today, it means that part of our time is dedicated now to grow this business, and we dedicate time. It’s a matter, I think, of focus to grow and of strategy. The renewable companies within Total have no problem to finance their projects and we know how to access the money, which is not the case of many listed companies. I don't see why it should not be the same. Again, now the strategy is expressed, up to us to be sure that we have the people dedicated, but it's the way we run the business.

Regarding the first question, my objective is clearly to outperform both of them. That's clear. And I would like also the stock to rerate accordingly, to be clear. By the way, we have a differentiation factor today,
which is our dividend and the yield we offer to investors. So, we'll see if it's reflected in the share price.

The 3 European major oil and gas companies have more or less the same strategy. I hope that you have taken away from this presentation that we are in an advanced stage compared to others, we have already some assets that can give you some figures and that we are well engaged in it. It's clear that we diverge with some of them. We consider that maintaining our oil and gas business is a condition of the transformation because it will provide to us the cash flow that we need. It's also compatible, like we show to you, with our climate ambition. We are today the first to announce that we can lower our scope-3 emissions by 2030.

So, I think we will keep, I would say, the fundamentals of the way we run the business with a certain discipline, are: looking at the breakeven, and at the same time, having the ambition to establish this business at a large-scale. In the way we set the ambition, we have also looked carefully to all the names you have mentioned in the electricity competitors to see in which way they want to develop their business. One difference is that compared to these big utilities, we don't have any hydro in our portfolio, which obviously has some interest in terms of storing electricity. That's the difference because when all of them are speaking about renewable capacities, they take on board the hydro capacity that's been inherited from the past. And we do not have this part of the missing piece of the puzzle in our portfolio.

Operator
Your next question comes from the line of Anish Kapadia from Palissy Advisors.

Anish Kapadia Palissy Advisors Limited - Director & Head of Energy
A couple of questions. First of all, the fall in crude oil that you see in terms of sales from Total, what does this mean for the retail marketing business, which I think previously was supposed to be a growth area now that you'll be selling less fuel? And also, any impacts on your chemicals growth plan? So, if you can give any updates in terms of your cash flow targets for those businesses?

And then secondly, there's clearly a lot of value in the Total brand in Europe and globally. And in a more connected world, there should be value in customers from their data, from cross selling. We see a number of companies that are increasingly valued on the basis of the number of customers they have. So, I was just wondering, have you thought about the value embedded in that existing customer base that you have and how further to leverage that in terms of cross-selling and use of that data?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Alexis is a fan of that data valuation. So, I will leave you in the second part, and think also the first one. Let's be clear, all the marketing businesses do not have the same profitability. When Alexis mentioned that he has mature assets, about 20%, all the sales are not equivalent in terms of margin per ton. The objective is to do what we have proposed by being selective about the sales, not only in terms of CO₂ impact, but also in terms of margins impact. And we see ways to, in fact, refocus part of the marketing business on the most profitable businesses and maybe give up the less profitable ones. You can complement obviously, and you can answer the second question, Alexis.
Alexis Vovk TOTAL SE - President of Marketing & Services
I completely concur with what you said. We have now to look at our businesses, obviously, based on the CO₂ emission that it generates for our customers. And we have to review our portfolio according to that. I think what was said earlier in the presentation is also that it's not only Total transitioning, it's also our customers. So obviously, in this marketing business, what we have to do is to transition with our customers. For example, bunkering is clear. We want to move our customers to LNG, and we will do that to make sure that they buy less carbon energy from us. Obviously, if at a certain date, they have not transitioned, then we will have to make decisions on that business. So, I think it's a very easy mindset. We have to help our customers to transition, and we then have to make arbitrage based on the CO₂ versus the margin it generates.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
The question is just you have plenty of data with your 10 million customers per day in your retail session. Why don't you sell it and make plenty of money with it? But my question is who will buy it, in fact, for you.

Alexis Vovk TOTAL SE - President of Marketing & Services
As a joke, I think we have heard question of putting an IPO on our Eren business. If we were a digital company and selling our data, maybe we will be the same as Apple. Yes, there is value in our customer data. I think it's all about using it internally to develop the services I was mentioning whether extending the existing services or buying new ones. I think what is key in marketing is that our systems are not proprietary anymore. I think we have to open up to larger ecosystems. There is data when you share those data with other actors of your ecosystem and create like this. Selling them is something that we're looking at, but I don't have any specific comment to make on that.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Okay. Great. But in fact, fundamentally, the idea is to develop more services to customers, and thanks to data. We are developing a digital. You have a project Alexis.

Alexis Vovk TOTAL SE - President of Marketing & Services
Clearly, electric mobility is digital native. I mentioned to you in my presentation that along the value chain, our objective is to keep the relationships end to end with the customer. So, it's very important that we are able to keep the customer in our ecosystem all the time. And this platform that is already up and running, that gives us access to 100,000 charging points already in Europe, can connect with other ecosystems. This is where the value of electric mobility and transition is coming from. I think it's a bit too early to give proper figures on the potential value of the services, but it is clearly the way we go forward.

Operator
Your next question comes from the line of Lydia Rainforth from Barclays.

Lydia Rose Emma Rainforth Barclays Bank PLC, Research Division - Director & Equity Analyst
In terms of the renewables business, you've obviously got Total Eren, Total Solar Quadran, SunPower. It
does seem quite a complicated structure. Why do you need all those different businesses? And within that, is it just geographical reach? How do you get the economies of scale for the construction companies and things like that? I'm just trying to work out practically how you make sure that those businesses aren't competing with each other in tenders?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President

No, they don't compete. It's not possible. It's complementary. It's organized. It's part of the history. I think one day, probably we'll have to put that together, but it's quite clear. In E&P, I have plenty of subsidiaries, one by country, and it's working well. They don't compete, that's clear. The geography has been split and there are different entities. Some are on the distributed generation. Some are more on the large solar farms. So they don't compete, and it's well taken into account.

It seems complex to you but it’s not so complex from an internal point of view. As you said, Total Eren is a minority partner but we develop them in the same way. So, it would be easy to reorganize if we would want to create a Total renewable company on the top. It would be easy. And then you will not see all these names, which is why in my presentation, you didn't see a single time these names. For me, all that is a portfolio of renewable, like we have a portfolio of E&P licenses, and I don't mention all the names of all the subsidiaries. It's just because it's still like a little infant. It’s like an entrepreneurial spirit, which we need to keep. I mean it’s also because I know that Philippe likes to keep these subsidiaries because each of them is building its business, and that's good because we are in a development mode. So, there is also a management advantage to keep sometimes some small entities, having their own business.

One Tech concept: it will be made in the right time and we need to think big. And if we want to think big, we'll need to organize that. There is a lot of reporting to please you so that you get plenty of reporting but we keep the current structure to keep the entrepreneurial spirit we have in the team. Okay.

Operator

Our next question comes from the line of Thomas Adolff from Credit Suisse.

Thomas Yoichi Adolff Crédit Suisse AG, Research Division - Head of European Oil & Gas Equity Research and Director

If we look at Europe long-term 2050, and obviously, refineries will be converted into biofuel plants and you can probably generate more money, but how do you offset the loss of earnings from the petrol station as heavy duty transportation is electrified because charge points are far less profitable.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President

By 2050, our renewable and power business will be so large, but it will be larger than our marketing business. The ambition is not to stop there.

And second, I think you have an asset in the marketing business, maybe we’ll sell all these networks of shops, and that's a question mark for us. We really consider them not only as a complementary business to selling fuels but as a business in itself. We have there some assets which could be valued. And not only
to sell them as we already said, but we can also develop a convenience store business. Total is maybe not the best company. We could take some partners to do that. But in fact, these assets could be developed. And it's true in Europe, it's also true in Africa, where we have probably one of the best networks.

So, I think I'm not so afraid by the fact that we can lose market in sales of liquids. That's why we need to embark in all these multi-energy businesses, including in Marketing & Services. Alexis will soon establish, by the way, a business unit dedicated to all these new energies, not being as an annex of the liquid fuels, but as an independent business unit in order to have its own strategy to grow the business.

Alexis Vovk TOTAL SE - President of Marketing & Services
I just want to concur. I mean in the strategy that we presented earlier this year, especially on Europe, we show that we have an objective of generating 40% of our cash flows in Europe from nonfuel revenues. So, this is clearly coming from the shop and from all the associated services linked to the mobility, whether it is carwashes, tolls, especially for trucks, whether it is car parks and so on. I think this is a complementary business. Whether you are charging on EV, you will still be mobile and you will still need to have the convenience of shopping in a nearby shop. I think this is something that we are looking very clearly.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
Thomas, if you take the figures which were given to you by Alexis out of the $2 billion of cash flow per year coming from Marketing & Services, fuel sales represent $1.3-1.4 billion or 2/3. So, it's interesting because it's stable, it's predictable. I mean there's less volatility. That's why we like this business. But at the scale of the company and 2050, it's not such a change.

Irene Himona Societe Generale Cross Asset Research - Equity Analyst
I had a question on renewables, if I may. Clearly, you explained the competitive advantages that you enjoy versus local utilities, your global reach, your trading capabilities. So if we take this specific deal in Spain, you said that this 5 gigawatt portfolio in Spain, thanks to your electricity trading capabilities, enables you to actually supply and cover all of your European sites with green electricity. I wonder if you can talk a little bit about how the trading platform of Total needs to adapt and changes its model? Because clearly, you cannot move, or they cannot move the electrons. It's not the same as physically moving a barrel of oil. So, what sort of new innovations or how does the model adapt and change? And does that create perhaps some different type of risks for that operation?

Patrick Pouyanné TOTAL SE - Chairman, CEO & President
It's an excellent question. By the way, it's not 5 gigawatts, it's 3 gigawatts out of the 5 that we need for our own operations. But your question is valid. It was a long discussion. In fact, at the end, it was a combination of internally on one side, the renewable people, who are very happy to have a corporate PPA, and on the other side, refining and chemical people who are quite happy to have green electricity at a good price. And in the middle, we have pressure from trading. So, Philippe, you can elaborate on the
management of these risks. By the way, one of the ideas also is to probably promote the interconnection within Spain and France politically. But can you take the questions?

Philippe Sauquet TOTAL SE - President of Gas, Renewables & Power

Well, first, what you have to memorize is that we have started yesterday to develop power trading, and we have been active in power trading and trading power across Europe since now more than 15 to 20 years. I was reading recently the ambition in power trading in terms of megawatt hour traded and where we're locating, we largely do, and we were giving the ambition for 2025. We are already at this level today.

So, we know that business. Yes, it's a very different business compared to all trading. We need to balance our operation half an hour by half an hour. We have a lot of conviction, especially in countries like Spain, where various limit interconnection between the Continental Europe, and we take that into account. We can, of course, use some physical assets and the CCGTs that we have can allow us to hedge our position on one side. We are developing also batteries on the other, but most of the flexibility will come from our ability to trade on the market and to resell or buy the power that we need to sell in Spain when we have too much and buy the power in the countries where we will not have enough in order to supply our entities. But it is something that we know how to do, but true that the extent of the contract is massive and is forcing us to develop a specialized team in order to address that.

Patrick Pouyanné TOTAL SE - Chairman, CEO & President

But I like this. It was the last question and I like the question because, in fact, for this question, I think you touch the real value that a large oil and gas company like an integrated company can bring to this business of renewables and power. Because it shows the value of the integration. And part of the answer will be that when we take onboard such contracts, we immediately think that we need to have more storage to build the business. And that's the beginning, I think, of a new creation of value.

First of all, I would like to thank all of you for your participation. Sorry, it has been a little long four hours and 30 minutes. I thank you because there were many questions along these 2 hours of Q&A. I'm sure you have more, and we will have the following weeks to come back to you and to answer to more of your questions.

As I said, for us, it was an important day because we have put together the strategy to transform Total into this broad energy company. I think it's a very interesting challenge, but we are also convinced with the Board of Directors that this is the right direction, as I said, to accelerate and to convince now investors that this model is basically one of the right model in order to grow in these fields. We've maintained our core business that we need to generate the cash flows and then to accelerate progressively the ambition of growing renewables and power to generate new cash flows. There is there a virtuous circle. Getting the fruits of all what we have prepared during the years makes us confident that we can develop this model, and I hope we will convince more and more investors that Total will be able to combine black and green for the benefit of our shareholders. Thank you for your attention.