5 May 2021

## Meeting with [redacted]

### Shells' Power Progress' strategy

- *The Powering Progress was published in February 2021 and has four main goals:*
  - *General value for shareholders to transform to clean energy*
  - *Achieving net-zero emissions*
  - *Powering lives with products and activities*
  - *Respecting nature by protecting the environment, reducing waste, and promote biodiversity*
- *Under its 'net-zero emissions' activities, Shell has proposed:*
  - *Become a net-zero emissions energy business by 2050 (operations & energy products)*
  - *Set 'Net Carbon Footprint' targets for its products, with 6-8% in 2023, 20% in 2030, and 100% in 2050 (compared to 2016)*
  - *On average, invest $2-3 billion /year in renewable and energy solutions*
  - *a methane emissions intensity of <2% in 2025, and an additional 25 Mt of CO2 storage by 2035*
  - *By 2030, provide renewable electricity to 50 million households*
  - *By 2030, operate 2.5 million charging points on electric vehicles*
  - *By 2030, increase the share of renewable and low-carbon fuels from 3% to 10%.*
- *Under its 'respecting nature' activities, Shell has proposed:*
  - *Use 30% of recycled plastics in its packaging by 2030*
  - *Use only re-usable or recyclable plastics by 2030*
  - *Invest in conservation*

### Shells' hydrogen projects

- *Shell is building a portfolio of hydrogen projects (see Background)*
  - *As a producer of solar and wind power, Shell will produce, transport and store renewable hydrogen*
  - *As a natural gas developer, Shell will produce e.g., transport and store low-carbon hydrogen, including the capture and storage of CO2*
  - *Shell is developing hydrogen tube trailers and hydrogen refuelling stations, including associated business models to fuel vehicle fleets.*
  - *Shell is developing hydrogen export technologies, including through liquefaction and shipping options for hydrogen*[1].
- *Shell has an existing and rapidly growing portfolio of electrolysers*
  - *The Refhyne project is a 10 MW electrolyser at their refinery in Cologne, visited by Commissioner Simson. In February, Shell announced the expansion to a 100 MW electrolyser.*

[1] On 21 April, Shell announced trial with hydrogen fuel cell ships in Singapore

- *Other project in the pipeline include the 10 MW electrolyser at the Emmen refinery (2022), a 200 MW electrolyser at Rotterdam refinery (2023), and 4000 MW electrolyser in Groningen (2027).*
- *The 200 MW electrolyser in Rotterdam refinery (Pernis) is expected to become the largest of its size, with investment decisions taken this year.*

## The European hydrogen strategy

- *The Commission is working on the implementation of the 20 action items under the hydrogen strategy, which was launched in July 2020*
  - *A number of proposals and activities have been concluded, such as:*
    - *The proposal for the cross-border transport regulation (TEN-E), which has proposed a separate category for hydrogen infrastructure and (maintained the one for) CO2.*
    - *The first calls for hydrogen project under Horizon 2020 has been concluded, and two projects of 100 MW electrolysers will be announced in the next month*
    - *The first selection round of the EU ETS Innovation Fund first call for large-scale projects has been concluded, with hydrogen being the single most frequently represented technology pathway. 70 projects have been shortlisted and will be undergoing evaluation in the 2nd round. A second call for large-scale projects will be announced later this year.*
    - *We have also put forward our proposal for a Clean Hydrogen Partnership with a budget of €1 billion over the period 2021-2027.*
    - *We have announced support for two regional clusters to develop Hydrogen Valleys, of which Groningen is a regional member.*
  - *The majority of the proposed actions will be published as part of the Fit for 55 package this summer and later this year, including:*
    - *Proposals for scaling up production and demand for renewable and low-carbon hydrogen,*
    - *Certification of renewable and low-carbon hydrogen,*
    - *Taxation of hydrogen*
    - *Rules for hydrogen under the EU ETS and the CBAM.*
    - *Rules fostering hydrogen infrastructure development and competitive markets under the 'Hydrogen and Gas markets decarbonisation' package (end of 2021).*
- *The opinion of Member States (Dec. 2020) and the draft report of the European Parliament (April 2021) support in broad lines the European hydrogen strategy*
  - *The Parliament vote is expected in early May.*
  - *The most contentious issue has been the extent and length in which low-carbon hydrogen production will play a role in achieving the 2050 climate goals*
- *The European Clean Hydrogen Alliance is currently in the process of collecting projects. The first results will be announced at the Hydrogen Forum in June 2021*
  - *Shell is represented in the roundtable on clean mobility ([redacted].*

## The Renewable Energy Directive and the Fit for 55 package

- ***The existing renewable transport targets under REDII***
  - *Hydrogen produced from renewable electricity[2] is eligible towards the renewables target in the transport sector in EU Member States.*
  - *The targets are achieved by putting an obligation on fuel suppliers, creating value for renewables and renewable hydrogen.*
  - *The renewable energy directive requires certain criteria to be met, which are developed in a delegated act to be published before December 2021. The Commission's intention is to publish it before or alongside the summer 'Fit for 55' package.*
  - *An early version of the draft delegated act has been leaked, resulting in questions from stakeholders (see defensives).*
- ***The upcoming revision of the renewable energy directive***
  - *The overall objective of the revision of the renewable energy directive will be to increase the targets and deployment of renewable energy from 32% to between 38-40% by 2030*
  - *It will consider quotas or obligations for renewable hydrogen beyond the existing targets in the transport sector*
  - *It will consider certification of renewable and low-carbon fuels*

## Main messages

- **The Commission appreciates Shell's new strategy, and the central of achieving net-zero emission therein**
  - The provisional agreement on the climate law provides certainty to Shell and its stakeholders of EU's climate ambitions in the short- and long-term.
  - Shell will be a central stakeholder in achieving EU's targets
  - We appreciate the participation of Shell in the global energy transition, and the pro-active role that oil and gas companies can play in this transition.
- **The Commission recognises the balanced approach in Shell's strategy to continue to produce fossil fuels, whilst becoming climate neutral.**
  - I have read with interest the responses to your strategy in the Volkskrant article (see Annex).
  - The Commission is aware that despite our increased ambitions for renewable and low-carbon energy, Europe's energy consumption will still be dominated by fossil fuels in 2030.
  - At the same time, we believe that rapidly transition away from fossil fuels will provide and create changes for the European economy, and creates market opportunities.
  - Still, we have identified an investment gap of at least €20 billion per year for additional renewable power production[3], and we are working on the right conditions to incentivise more investments.

[2] These are referred to as renewable fuels of non-biological origin (RFNBOs).

[3] SWD (2020) 98 final. Europe's recovery needs.

- We believe that the energy transition is a growth strategy for our economy, and that there are economic changes for both our producers and consumers.

- **The Commission welcome Shell pioneering role in clean hydrogen**
  - The Commission's targets of 6 GW of electrolyser by 2024, and 40 GW of electrolysers are very ambitious, and we need ambitious companies.
  - With our 'Fit for 55' proposal, we want to put forward a comprehensive package that will cover all different regulatory aspects of relevance to hydrogen.
  - At the same time, we will continue to support the upscaling of hydrogen production through the different financial instruments, including the EU Innovation Fund, the Clean Hydrogen Partnership, our Horizon Europe programme and our cohesion funds.
- **The Commission welcomes any further input for the upcoming Fit for 55 package**
  - Following a large number of public consultations and stakeholder workshops, the services are currently finalising the impact assessments for their policy proposals.
  - However, these will be finalised very shortly.
  - We would like to invite you for further discussions once our policy proposals have been published.

## Defensives (if applicable)

- **The proposed criteria to account hydrogen under the renewable energy target for the transport sector are too strict.**
  - The Commission is requested under REDII to set out methodologies ensuring that the use of renewable fuels of non-biological origin (RFNBOs) is contributing to the decarbonisation effort. This concerns in particular rules for the production of renewable hydrogen from grid electricity as well as a methodology to determine emissions savings.
  - The delegated act is specific for renewable hydrogen counted towards renewables target in the transport sector under REDII, and will need to consider how to implement additional requirements, including requirements for temporal and geographical correlation, and the fact that the electrolyser needs to be built ahead of any renewable power capacity used to power the electrolysers.
  - We are aware of the importance of this topic for the uptake of the renewable hydrogen market. And we are looking it in a way that supports the achievement of the goals of the EU Hydrogen Strategy which gives a key role for RES Hydrogen to achieve climate neutrality.
  - These delegated act is part of the existing legislation, and therefore needs to be implemented. At the same time, however, there is an ongoing revision of the renewable energy directive. Irrespectively of the outcome of the revision of the renewable energy directive, the delegated act is important because it will determine at least the next 3 years until a revision of REDII is in place.
  - We are making sure that the revision of REDII brings will be in line with the delegated act, as well as principles outlined in ESI and hydrogen strategy. Policy stability is key!
  - Services are working on how to translate input into delegated act that corresponds with regulatory requirements. We aim to present ahead of Fit for 55 package.
  - It would not be appropriate, however, to comment on the leaked text. Work on these methodologies is still ongoing. They have not yet been politically validated.

## Background

**Figure 1. Overview of Shell's business models in hydrogen**

**Figure 2. Overview of Shell's pipeline of electrolyser projects**

**Annex 1. Volkskrant article (11 Feb. 2021)**

# Shell zegt klimaatvriendelijker te willen worden, maar fossiel blijft koning

Shell presenteerde donderdag zijn langverwachte langetermijnstrategie waarmee het concern klimaatverandering wil tegengaan. Olie en gas blijven het belangrijkst (zij het olie steeds een beetje minder). Toch wil Shell $CO_2$-neutraal zijn in 2050. Hoe zijn deze twee verenigbaar?

**Bard van de Weijer**11 februari 2021, 17:36

**Een turbine in een windpark voor de kust van Egmond aan Zee. Het park is een 50-50 joint venture tussen energiebedrijf Vattenfall (voorheen Nuon) en Shell.**Beeld Reuters

Shell wordt dus geen groene energieproducent. De olieproductie van het

[redacted]