

Shell<sup>i</sup> welcomes the proposal for an EU Carbon Removals Certification Framework (CRCF), as an important first step to support the development of carbon removal projects in Europe.

Shell's [target](#) is to become a Net Zero Emissions (NZE) energy business by 2050, including the emissions from the energy products we sell (scope 3 emissions). Shell also has a target to halve scope 1 and 2 absolute emissions under our operational control by 2030 (compared to 2016 on a net basis). The biggest driver for reducing our net carbon intensity is increasing our sales of low-carbon products and services. We are scaling up investment in renewable power, hydrogen, sustainable aviation fuels (SAF), and carbon capture utilisation and storage (CCUS).

We firmly believe that greenhouse gas emissions avoidance and reductions through energy efficiency measures, the accelerated deployment of renewable and low carbon energies and enabling infrastructure will need to be the primary mechanisms for achieving NZE across all sectors in the EU. In addition, we think it is necessary to implement policies that direct investment into carbon removal solutions. The EU long-term scenarios that underpin the [2030 Climate Target Plan](#) show the importance of carbon sinks in achieving the EU's climate targets. Investment in carbon removal pathways, such as biochar, removals-focused nature-based solutions (e.g., ecosystem restoration, afforestation) and direct air capture with carbon storage (DACCS), and their enabling value chains (e.g., renewable energy, CO<sub>2</sub> transport and storage infrastructure capacity, capture equipment manufacturing supply chains), is needed in this decade to reach the scale of carbon removals likely necessary to meet NZE.

We think scaling up carbon removals needs to be done without diverting efforts to achieve direct emission reductions in all sectors of the economy. In this context, we would recommend the EU CRCF adopts the definition of the Intergovernmental Panel on Climate Change (IPCC) for carbon dioxide removal<sup>1</sup> and keeps emission reductions separate from removals.

We strongly welcome the emphasis the Commission places in the proposed CRCF on the quality of certified carbon removals. By setting out what constitutes the minimum requirements for quality – and what is not acceptable - the EU CRCF will help drive quality assurance and standardisation. The four quality criteria the proposed CRCF outlines – quantification, additionality, long-term storage and sustainability – should be considered as interdependent. We suggest extending sustainability to also include the championing of local benefits and rights and emphasise the importance of removals being net-removals, i.e., when calculating the carbon value of a project, emissions generated during the process of the removal project activity should be deducted from the gross amount of carbon removed from the atmosphere. The accounting of net-removals should allow for market-based mechanisms where ownership of an environmental attribute takes precedence over the tracking of individual molecules or electrons. We also note that the estimated duration of carbon storage ranges significantly for different carbon removal solutions and that different carbon removal solutions have differing roles in the energy transition. It is therefore important for durability to be reflected through certification methodologies, validation and verification.

Quality and a commitment to continuous improvement need to guide the adoption of methodologies by the Commission for different carbon removal technologies under the CRCF. In a recent report by Shell and BCG on [the Voluntary Carbon Market](#), 91% of buyers rank monitoring, reporting and

---

<sup>1</sup> IPCC defines carbon dioxide removal as: Anthropogenic activities removing CO<sub>2</sub> from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products. It includes existing and potential anthropogenic enhancement of biological or geochemical sinks and direct air capture and storage, but excludes natural CO<sub>2</sub> uptake not directly caused by human activities. [IPCC Special Report: Global Warming of 1.5 degC. Summary for Policymakers](#).

verification (MRV) as one of their top criteria in credit purchase decisions. Buyers want to ensure that the credits they buy have a measurable benefit against a robust baseline.

To ensure certification methodologies and MRV continuously improve and reflect the latest developments in science, we think the Commission should consider operating its approval process for methodologies similar to CORSIA: methodologies are assessed and must prove they meet the Commission's requirements for each technology type. Regular review periods should be built in. This would allow the Commission to leverage the expertise of independent standards / schemes.

At the same, the CRCF could consider establishing a threshold standard per methodology that eligibility is assessed against. For example, already today if long-term carbon stored product is a building structural design, the Eurocode Standard EN 1990 (2002) requires minimum 50 years working life or 100 years if monumental, regardless of if the product remains in use afterwards or is recycled. This is very specific to the carbon removal type, so it is important that the Commission is clear on its threshold standard per methodology.

Demand certainty is a key catalyst for investment in high quality carbon removal projects. Providing at the earliest clarity on certification criteria and use of certificates in the EU will be an important enabler. We therefore support a timely adoption and implementation of the CRCF for the EU and the roll out of supporting certification methodologies.

Once a transparent and robust CRC framework is in place, the trading of carbon credits from endorsed projects should promote carbon removal development and deployment. Shell's preference is for a market-based mechanism for trading such credits that can encourage significant private investment for carbon removal projects.

For technical carbon removals involving direct air capture or bioenergy with CCS, the EU requires storage. This means the EU needs to increase its development and encourage the development of transport and storage infrastructure to accommodate growth of removals to accommodate future carbon removals. Greater clarity on treatment of cross-border carbon storage is necessary, in particular the treatment of storage outside the EU (e.g., UK).

Trading of carbon removal units under the auspices of the UN can lead to investment in large scale cross border investments. Use of Article 6 of the Paris Agreement can enable cost reductions for lowering emissions via carbon trading between nations. Similarly, the inclusion of carbon removals in the EU ETS will play an integral role in the transition from net zero to net negative.

The development and assessment of the EU's 2040 target, to be proposed in 2024, offers an important opportunity to quantify and agree on the role that carbon removals will need to play in the pathways to NZE and the overall EU carbon budget for 2030 to 2050. The EU should provide a policy framework with clear deployment timelines allowing predictable investment into carbon removals and clarity on the role of voluntary and regulatory markets. This should be seen as complementing the strong focus the EU must maintain on greenhouse gas emissions avoidance and reductions.

---

i **Cautionary note**

The companies in which Shell plc directly and indirectly owns investments are separate legal entities. In this document “Shell”, “Shell Group” and “Group” are sometimes used for convenience where references are made to Shell plc and its subsidiaries in general. Likewise, the words “we”, “us” and “our” are also used to refer to Shell plc and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. “Subsidiaries”, “Shell subsidiaries” and “Shell companies” as used in this document refer to entities over which Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as “joint ventures” and “joint operations”, respectively. “Joint ventures” and “joint operations” are collectively referred to as “joint arrangements”. Entities over which Shell has significant influence but neither control nor joint control are referred to as “associates”. The term “Shell interest” is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interest.

**Forward-Looking Statements**

This document contains forward-looking statements (within the meaning of the U.S. Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management’s current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Shell to market risks and statements expressing management’s expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as “aim”, “ambition”, “anticipate”, “believe”, “could”, “estimate”, “expect”, “goals”, “intend”, “may”, “milestones”, “objectives”, “outlook”, “plan”, “probably”, “project”, “risks”, “schedule”, “seek”, “should”, “target”, “will” and similar terms and phrases. There are a number of factors that could affect the future operations of Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this document, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell’s products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, judicial, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; (m) risks associated with the impact of pandemics, such as the COVID-19 (coronavirus) outbreak; and (n) changes in trading conditions. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this document are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Shell plc’s Form 20-F for the year ended December 31, 2022 (available at [www.shell.com/investor](http://www.shell.com/investor) and [www.sec.gov](http://www.sec.gov)). These risk factors also expressly qualify all forward-looking statements contained in this document and should be considered by the reader. Each forward-looking statement speaks only as of the date of this document, 23 March 2023. Neither Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this document.

**Shell’s net carbon intensity**

Also, in this document we may refer to Shell’s “Net Carbon Intensity”, which include Shell’s carbon emissions from the production of our energy products, our suppliers’ carbon emissions in supplying energy for that production and our customers’ carbon emissions associated with their use of the energy products we sell. Shell only controls its own emissions. The use of the term Shell’s “Net Carbon Intensity” is for convenience only and not intended to suggest these emissions are those of Shell plc or its subsidiaries.

**Shell’s net-Zero Emissions Target**

Shell’s operating plan, outlook and budgets are forecasted for a ten-year period and are updated every year. They reflect the current economic environment and what we can reasonably expect to see over the next ten years. Accordingly, they reflect our Scope 1, Scope 2 and Net Carbon Intensity (NCI) targets over the next ten years. However, Shell’s operating plans cannot reflect our 2050 net-zero emissions target and 2035 NCI target, as these targets are currently outside our planning period. In the future, as society moves towards net-zero emissions, we expect Shell’s operating plans to reflect this movement. However, if society is not net zero in 2050, as of today, there would be significant risk that Shell may not meet this target.

**Forward Looking Non-GAAP measures**

This document may contain certain forward-looking non-GAAP measures such as cash capital expenditure and divestments. We are unable to provide a reconciliation of these forward-looking Non-GAAP measures to the most comparable GAAP financial measures because certain information needed to reconcile those Non-GAAP measures to the most comparable GAAP financial measures is dependent on future events some of which are outside the control of Shell, such as oil and gas prices, interest rates and exchange rates. Moreover, estimating such GAAP measures with the required precision necessary to provide a meaningful reconciliation is extremely difficult and could not be accomplished without unreasonable effort. Non-GAAP measures in respect of future periods which cannot be reconciled to the most comparable GAAP financial measure are calculated in a manner which is consistent with the accounting policies applied in Shell plc’s consolidated financial statements.

The contents of websites referred to in this document do not form part of this document.

We may have used certain terms, such as resources, in this document that the United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website [www.sec.gov](http://www.sec.gov).