In-depth: Royal Dutch Shell plc (Shell) climate vote

30th of April 2021 | Shell AGM 18th of May 2021

Global Climate Insights

Is Shell serious about its climate transition plan?

Shell's 2030 climate commitments. By 2030 Shell has committed to decrease the intensity of its emissions (energy business only) by 20%, and reposition its business away from oil, towards gas and chemicals, and renewables and marketing. It plans to achieve this by expanding gas production (20% by 2025), renewable electricity and EV infrastructure, increasing biofuels and hydrogen (blue and green), and with significant use of nature-based offsets (NbS) and carbon capture and storage (CCS).

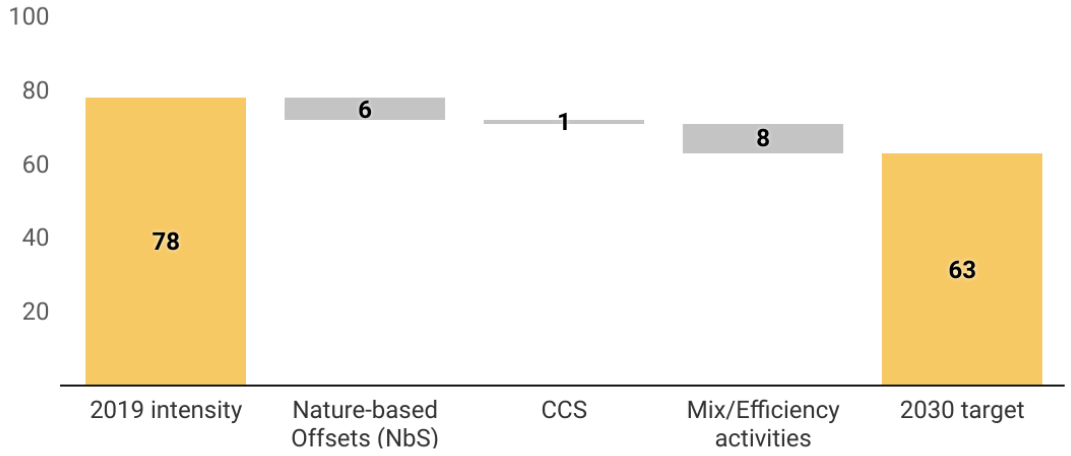
How feasible is Shell's use of abatements? Shell plans to use 120 Mt NbS p.a by 2030 and 25Mt CCS p.a by 2035. This amount of NbS is greater than the size of voluntary offsets traded in 2019 (104Mt)[1], and equates to a non-conifer forest the size of Washington State (which needs to be mature by 2030). Its CCS ambitions are similarly difficult, today there is 40Mt of CCS operational globally, and only 15% is stored geologically, most is attributable to Shell's Gorgon JV where its CCS is not currently working.

Abatements could get Shell halfway to its 2030 emission intensity target. Shell aims to reduce the carbon intensity of its business from 78 to 63g CO_2e/ MJ from 2019 to 2030. If Shell had implemented its CCS and NbS goals in 2019, they would provide 50% of Shell's required reduction (chart below).[2] This highlights the vulnerability of Shell's targets if it is unable to implement NbS and CCS in the timeframe it plans, and shows the actions to reposition Shell's business (even in the current high level form) are not the predominant driver of 2030 targets.

Is Shell's 2030 target Paris-aligned? No. Shell will not reach the carbon intensity required under Transition Pathways Initiative's below 2 °C pathway for oil and gas, missing the 2030 target by 32%. Carbon Tracker has found that at least 66% of Shell's capex is outside a beyond 2 °C scenario.[3]

Shell's climate vote should assess the credibility of its plan in the next 10 years, and genuine action is lacking.

Chart: Shell potential contribution of offsets/CCS to emission intensity targets FY19 to FY30 (g CO2e/MJ)



Source: Shell company data, ACCR estimates

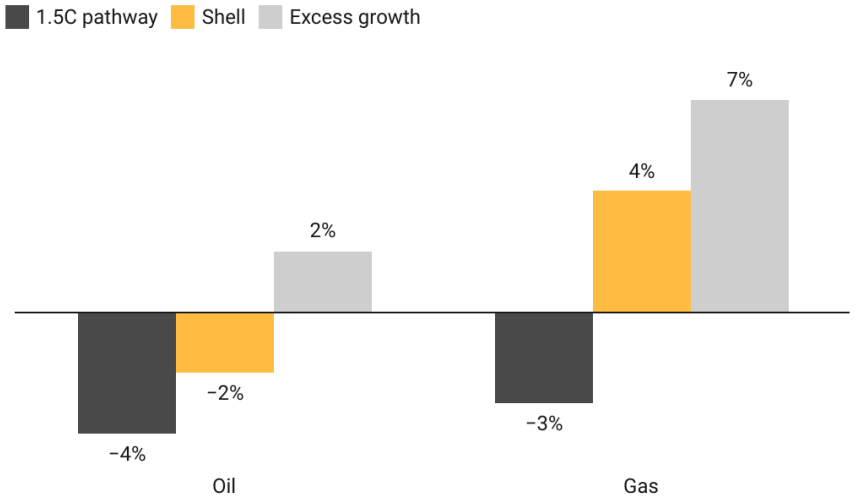
[1] Ecosystem Marketplace (2020), Voluntary Carbon and the post pandemic recovery
[2] We estimate a~6g CO_2e/ MJ reduction from CCS and ~1g CO_2e/ MJ reduction from NbS, and assume Shell uses 25 Mt of CCS by 2030.
[3] Transition Pathways Initiative (2020), Tool and Climate Action 100 (2021), Shell Net-Zero Company Benchmark

1. Why Shell's emission reduction targets are not Paris-aligned

Oil and gas growth does not align with a 1.5 °C pathway

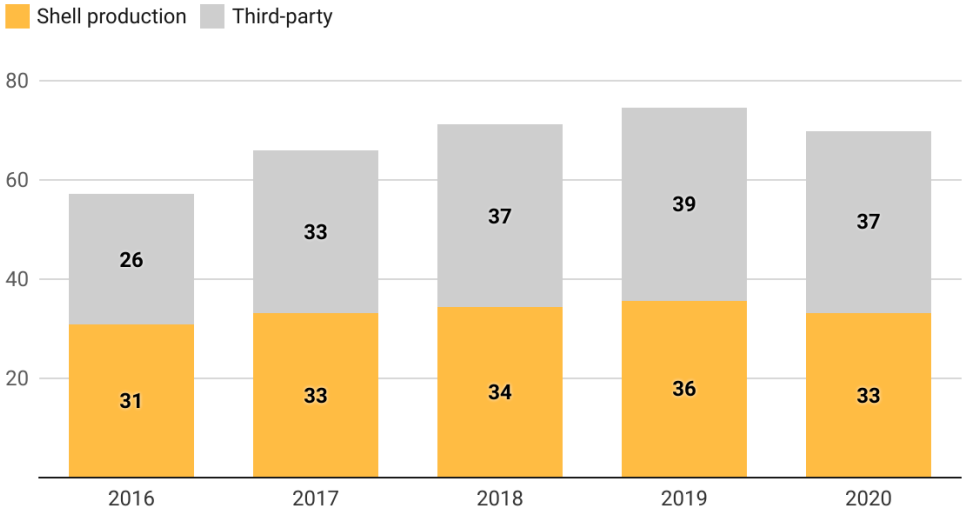
To follow a 1.5°C consistent pathway, the world needs to decrease oil production by 4% p.a, and gas production by 3% p.a[4] between 2020 and 2030. This is in contrast to Shell's commitment of a 1-2% p.a decline in oil production and implied 4% p.a increase in gas production[5]. In addition, Shell makes no commitments to reduce the oil and gas it sells, which is ~3x[6] more than its production and the key driver of its emissions (scope 3).

Chart: Oil and Gas production growth p.a 1.5 °C pathway compared to Shell's commitments



Over a 10 year period this would equate to a ~50% increase in gas production for Shell, compared to a 26% decline under a 1.5 degree pathway

Chart: Shell's LNG production and Sales 2016 to 2020 (Mt)



Source: Company data. The Production Gap Report: 2020 Special Report.

[4] SEI, IISD, ODI, E3G, and UNEP. (2020). The Production Gap Report: 2020 Special Report http://productiongap.org/2020report
[5] Shell is targeting growth in gas production by 7 Mt p.a by 2025
[6] Shell (2021), Strategy Day Presentation transcript, p.6

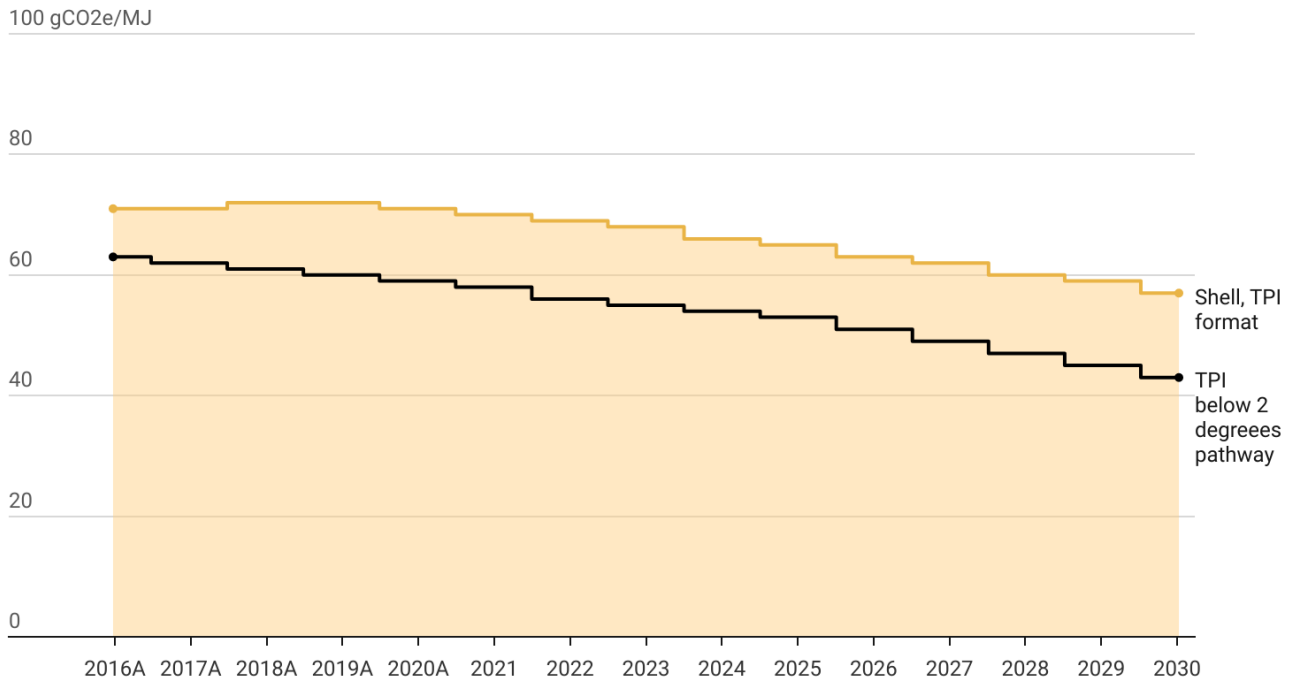
Shell's intensity targets do not align with a 1.5 °C or Below 2°C pathway

Without an absolute emissions reduction target, investors must rely on existing tools that allow intercomparison between companies on their carbon intensity performance. One such tool is TPI's sectoral decarbonisation benchmark, which provides a year-on-year transition target for oil and gas companies on an intensity basis. Though the benchmark is not 1.5 °C aligned (it is based on IEA's below 2 degrees, B2DS, which roughly aligns with a global warming of 1.75 °C by 2100, i.e it is more lenient than 1.5°C), it is a way to measure whether companies meet the bare minimum of the Paris Agreement's ambition of keeping global warming to less than 2°C.[7]

Shell's intensity target falls short of meeting even the lowest requirement of emissions reduction for keeping temperatures below 2°C. This is partially a result of its high emissions intensity baseline (set in 2016 close to the peak of its production) and partially due to its lack of ambition in reducing absolute emissions in the next 10 years.

Using the TPI below 2 °C pathway for oil and gas, by 2030 Shell would need to reach an emissions intensity of ~43g CO_2e/MJ, this compares to Shell's target intensity of ~57g CO_2e/MJ[8], implying Shell's plan will miss a less than 2°C pathway by a third (32%). We have used TPI's data on Shell's intensity target as this aligns with TPI's sector approach, and includes scope 3 emissions from Shell's own products but not from third parties.

Chart: Shell's emission intensity compared to TPI below 2 °C pathway



Source: Company data. Transition Pathways Initiative (2020), Tool.

[7] International Energy Agency (2017) Energy Technology Perspectives 2017
[8] We have referenced TPI's methodology which excludes scope 3 from third-party products

66% of Shell capital expenditure is misaligned with climate transition

Carbon Tracker has conducted analysis on Shell's oil and gas upstream projects to assess how much of its capital expenditure is aligned with the Paris Agreement budgets. To do this it maps capital expenditure projects to climate scenarios including IEA's B2DS, Sustainable Development Scenario, and excludes projects that are outside of the Stated Policies Scenario (STEPS - business as usual scenario) as it assumes these projects would not be sanctioned.

Analysis released as part of the CA100+ Net Zero Company Benchmark identified that $3.94bn of projects had been sanctioned in 2019 that are outside of IEA B2DS and of Shell's potential capital expenditure (2020 to 2040) 66% is inconsistent with IEA B2DS (only 34% is consistent). We note this number would be much larger if it were to include capital expenditure outside of STEPS, which was 30-40% as last reported by Carbon Tracker in October 2020.[9]

The ~US$4.2bn LNG Canada project (train 3 and 4), which is central to Shell's gas expansion plans, is deemed incompatible with both the IEA B2DS and the higher warming Sustainable Development Scenario (SDS)[10]. The other asset contributing to Shell's gas expansion is Nigeria LNG (Final Investment Decision taken May 2020), which could be cheaper and therefore not outside of IEA B2DS.

Table: CA100+ Net Zero Company Benchmark capital allocation indicators (March 2021)

Indicator for Upstream Oil & Gas Sector	Royal Dutch Shell assessment
1. Number of projects sanctioned in 2019 that are outside of the IEA Beyond 2 Degrees scenario	US$3.94bn
2. Trajectory of impairment price assumptions	Going up
3. What is the maximum price in the company's commodity price forecast (Brent equivalent)?	$60 (2023)
4. What is the percentage of the company's potential future oil & gas CAPEX that is inconsistent with the IEA's "Beyond Two Degrees" scenario?	66%

Source: Shell CA100+ Net Zero Company benchmark analysis (2021). Climate Action 100 (2021), Shell Net-Zero Company Benchmark

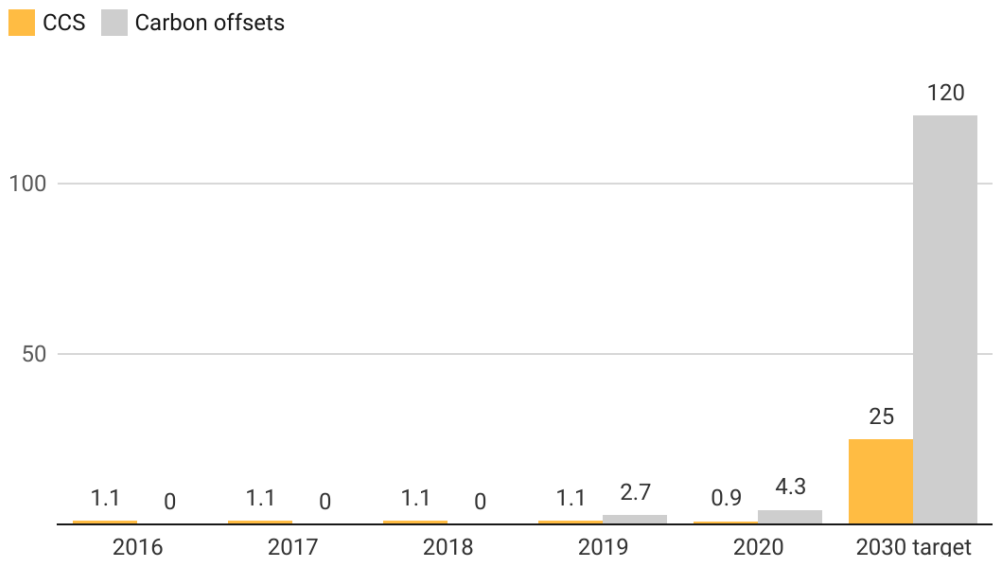
[9] Carbon Tracker Initiative (2020), Fault Lines: How diverging oil and gas company strategies link to stranded asset risk.
[10] Carbon Tracker Initiative (2020), Fault Lines: How diverging oil and gas company strategies link to stranded asset risk and Climate Action 100 (2021), Shell Net-Zero Company Benchmark

2. How to assess a credible use of carbon offsets and CCS?

To keep within a 1.5 °C pathway the focus for credible climate transition plans must be on actual, permanent emission reductions. With this in mind, the significance of Shell's intended use of offsets i.e. nature-based solutions (NbS) and Carbon Capture and Storage (CCS) raises a number of concerns.

As demonstrated in the chart below, under Shell's target it plans to increase CCS by up to 25x by 2035 and offsets (including NbS) by 30x by 2030.

Chart: Shell's current use of carbon capture and storage and carbon offsets vs 2030 targets (CO_2e Mt)
Shell will require a material increase in offsets/CSS capacity on 2020 of 25x for CSS and 30x for offsets to achieve its 2030 targets.



Source: Shell's Sustainability report FY20. Note for simplicity we assume Shell reaches 25Mt of CCS by 2030.

How offsets and CCS could contribute to Shell's emission intensity targets

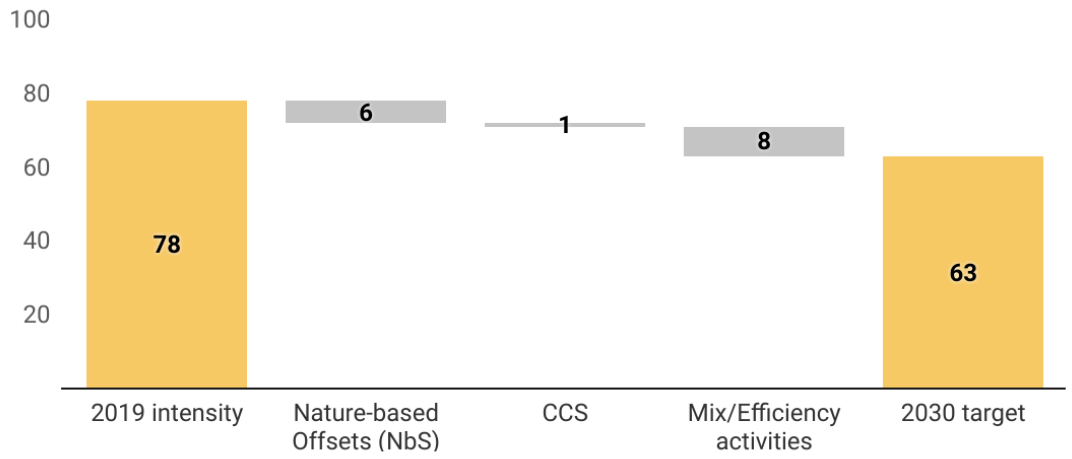
Shell aims to reduce the carbon intensity of its business by ~15g CO_2e/ MJ from 2019 to 2030. Given the large contribution of CCS (25Mt p.a by 2035) and NbS (120 Mt p.a by 2030) we have sought to quantify the importance of these abatement options to Shell's emissions intensity reduction.

If we use Shell's 2019 emission intensity of 78g CO_2e/ MJ (prior to COVID-19) and assume that Shell implemented its CCS and NbS goals at that time, NbS would provide a ~6g CO_2e/ MJ (~40%) reduction and CCS ~1g CO_2e/ MJ (~10%) reduction. Shell would be halfway to its 2030 target. This highlights two things, the vulnerability of Shell's targets if it is unable to implement NbS and CCS in the timeframe it plans, and, actions taken by Shell to reposition its business and operations are not the driving force in reaching its targets.

Shell has disclosed some of the activities it will be undertaking to contribute to our estimated 8g CO_2e/ MJ reduction (~50%) in its emissions intensity target - we have outlined them in our table summarising Shell's climate transition plan commitments (section on Decarbonisation strategy 2030**)**. Shell outlines its example energy transition milestones to get to 2030, identifying low-carbon power (renewable electricity and EV charge points) as the most significant contributor, followed by low-carbon fuels (blue and green hydrogen, biofuels).

However, the details are very light and with no quantification it is very difficult to assess the credibility of these actions.

Chart: ACCR estimated contribution of NbS/CCS to Shell's emission intensity targets 2019 to 2030 (g CO2e/MJ)



Source: Shell company data, ACCR estimates. Note for simplicity we assume Shell reaches 25Mt of CCS by 2030.

How do we assess the appropriate use of these NbS and CCS? Quality offsets and affordable, effective CCS have a role in reducing the carbon intensity of oil and gas extraction, processing and consumption as we phase-down the industry but they are not a mechanism to allow the industry's expansion and prolong use of fossil-fuels. Due to the inherent limitations and risks, their use must start as soon as possible and have a clear end date. The following sections provide specific commentary on the considerations for nature-based solutions and CCS deployment for Shell.

Reliance on nature-based solutions

Nature-based solutions (NbS) rely on removal of CO_2 from the atmosphere via redevelopment or protection of the natural environment. By 2030 Shell expects that its own portfolio of NbS will be sufficient to meet the carbon credit needs of its customers. The volume of voluntary carbon credits traded globally in 2019 is estimated to be 104 Mt, ~15 Mt less than Shell's NbS target[11].

For NbS, apart from requiring clear end dates on use, some of the key issues are the long lead times required to fully establish projects, ecosystem considerations, and the size and credibility of the schemes. Shell appears to be focused on addressing the credibility; how credible the schemes are will only become clear over time as any unintended impacts on ecosystems and communities eventuate.

With regard to size, the amount of nature-based solutions Shell plans to use would equate to a non-conifer forest the size of Washington State (which needs to be mature by 2030).[12] If all oil and gas companies adopted this approach, the land size required would become continental. Instead of placing so much weight

[11] Ecosystem Marketplace (2020), Voluntary Carbon and the post pandemic recovery

[12] CSIRO (2011), Opportunities for carbon forestry in Australia, p. 26.
Washington state has an area of ~185k km^2 compared to the equivalent land size need of 240k km^2

on offsets to address scope 3 emissions, more investment is required to work with customers to establish the infrastructure to transition to zero carbon energy sources.

Shell's investment: In 2020 Shell invested US$90m in development and purchase of NbS and expects to invest US$100m each year.

Shell's projects

Projects currently generating carbon credits for Shell include:

- Select Carbon in Australia which runs carbon farming projects on 10M hectares (acquired in 2020).
- Conservation projects in Indonesia, Cambodia, Peru, Guatemala and Kenya.
- Reforestation projects in Mississippi Delta (USA), Ghana and Kenya.
- Afforestation (creating forests) in China .

Future projects expected to contribute to Shell's target:

- Partnership with Staatsbosbeheer, the independent Dutch state forestry service, to plant 5M+ trees over the next 12 years.
- 300 hectare reforestation project in Spain (Castilla y Leon region).
- 800 hectare reforestation project (Queensland, Australia).

Carbon Capture and Storage (CCS) and Carbon Capture Utilisation and Storage (CCUS)

Carbon Capture and Storage is the process of capturing CO_2 from industrial production or the atmosphere for permanent storage, most commonly in underground reservoirs. Carbon Capture Utilisation and Storage (CCUS), also involves capturing carbon from industrial processes but it is used for industrial purposes, most commonly injection into oil wells for enhanced oil recovery (EOR). Unfortunately use of captured carbon for EOR can result in significant re-emission of the CO_2 into the atmosphere, with some CCS/EOR projects having retention rates below 30%.[13]

Currently CCS facilities have the potential to capture and permanently store around 40 Mt of CO_2 every year.[14] The table below shows the top 6 operational CCS facilities globally (this includes Shell's Gorgon CCS project JV), highlighting that 76% of CO_2 captured from these projects is used for EOR rather than permanent geological storage.

Table: Operational CCS facilities - greater than 2Mt p.a

Company	Project	Capacity	Industry	Country	Operation date	Storage type
Exxon Mobil	Shute Creek Gas Plant	7	Natural gas processing	Wyoming, United States	1986	Enhanced Oil Recovery

[13] Australian National University (2021), 'Clean' Hydrogen? An analysis of the emissions and costs of fossil fuel based versus renewable electricity based hydrogen.
[14] Global CCS Institute (2020), Global status of CCS 2020

Dakota Gas	Great Plains Synfuels Plant and Weyburn-Midale	3	Synthetic natural gas	North Dakota, United States	2000	Enhanced Oil Recovery
Occidental Petroleum, Sandridge Energy	Century Plant	5	Natural gas processing	United States	2010	Enhanced Oil Recovery & Geological Storage
Petrobras	Petrobras Santos Basin Pre-Salt Oil Field CCS	4.6	Natural gas processing	Brazil	2013	Enhanced Oil Recovery
Chevron, Royal Dutch Shell, Exxon	Gorgon Carbon Dioxide Injection (currently capped capacity)	4	Natural gas processing	Australia	2019	Dedicated Geological Storage
Qatar Petroleum	Qatar LNG CCS	2.1	Natural gas processing	Qatar	2019	Dedicated Geological Storage
	Total	**25.7**				

Source: Global CCS Institute (2020), Global status of CCS 2020

In FY20 Shell stored ~1Mt of CO_2 via CCS and states it currently has ~4.5 Mt of capacity. It is proposing to have an additional 25Mt p.a in capacity of CCS by 2035 but it does not yet have the CCS assets that will be able to store the carbon and has not disclosed which facilities or in what part of the value chain it plans to use CCS. Disclosure of these details will better enable the assessment of how effective CCS could be in assisting Shell's GHG reduction efforts.

A 2030 target should only include the CCS facilities that are operational and working today (or in the next year) with clear disclosure of assets and addressable emissions. The rationale for this is that nine years does not allow a lot of time to effectively deploy a new CCS facility and the risk of projects not progressing or working is high.

Investment: In 2020 Shell invested US$70 million in CCS.

Shell's current CCS projects include:

- Quest in Canada (~1Mt capacity), Shell has a 10% interest and this facility.
- Northern Lights in Norway (JV Total and Equinor). Final Investment Decision was in 2020.
- Gorgon CCS project in Australia.

Case Study: The Gorgon CCS Project

As shown in the table above the use of CCS to permanently store carbon is limited. Shell's Gorgon JV CCS project is the largest facility designed to permanently store CO_2 however the project has been plagued with issues[15]. See the box below for further detail.

Gorgon CCS Project

Gorgon Gas Plant and CCS project is operated by Chevron and owned as part of a joint venture with Exxon (25%), Shell (25%), Osaka Gas, Tokyo Gas and JERA. The gas plant began operation in 2016 and can produce up to 15.6Mt LNG (the largest in Australia). While the CCS facility began injection in 2019 a key part of the system is not working. The WA government has capped CO_2 injection at one third of its capacity until the issue is remedied with the remaining CO_2 being released into the atmosphere.[16] The Gorgon CCS plant was only ever designed to capture up to 40% of CO_2 emissions from the plant, leaving >60% unabated, along with all scope 3 emissions.[17] That percentage capture is currently closer to 13%.

CCS issues faced:[18]

- 3 years behind schedule (original start date 2018).
- Delayed start to CO_2 injection.
- The ground where the CO_2 is to be injected contains water (beneath Barrow Island) which must be removed prior to $C0_2$ injection, impacting the pressure management system.
- Sand clogging the pressure management system.

Costs: Estimated to be US$2.4bn[19]. $60m in funding was provided by the Australian government on the condition that the site stores 80% of CO_2 it extracts in reservoirs.

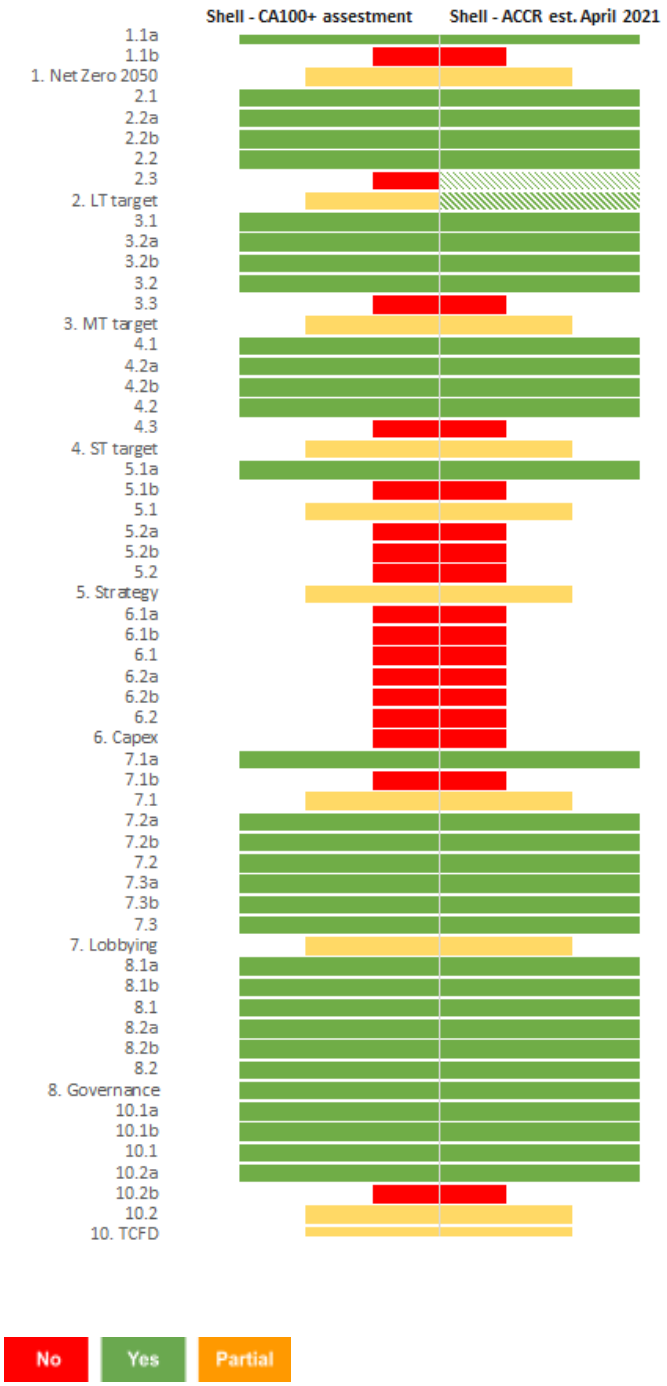
Future: Gorgon plans to fix the pressure management system before mid-2021.

[15] WA today (2021) , Emma Young, More carbon to be vented in further embarrassment for Chevron's Gorgon
[16] Boiling Cold (2021), Peter Milne, Gorgon emissions to soar until Chevron fixes restricted CO2 injection
[17] Chevron (2019), Fact sheet: gorgon carbon dioxide injection project
[18] Chevron (2020) Gorgon Project Carbon Dioxide Injection Project
[19] Boiling Cold (2021) Peter Milne Chevron's Gorgon emissions to rise after sand clogs $3.1B C02 injection system

3. Climate vote assessment - Shell's Net Zero Company Benchmark

We have reviewed Shell's February disclosure to see how it may impact the CA100+ Net Zero Company benchmark assessments that were completed earlier this year, relying on Dec-2020 data.

Chart: Where could Shell's Net Zero Benchmark change?



Shell CA100+ assessment:
(Dec-2020 data)

1 No, **1** Yes, **7** Partial

ACCR updated assessment:
(Feb-2021 data)

1 No, **2** Yes, **6** Partial

ACCR has reviewed Shell's Net Zero Company benchmark scores and identified one sub-indicator (2.3 long-term emission reduction targets) that may change as a result of Shell's February announcements

In our view some indicator assessments may even need to be revised down.

ACCR has also identified sub-indicators where CA100+ assessment does not appear to be reflective of Shell's actual commitments.

We believe sub-indicators 2.2b, 2.3b and 4.3b should move from Yes to No, to reflect Shell's omission of relevant scope 3 emissions from targets.

We have set our view of Shell's current climate commitments against the key disclosure areas included in the CA100+ Net Zero Company Benchmark.

Table 2: Shell climate disclosures against the CA100+ Net Zero Company Benchmark indicators

Disclosure Indicator	ACCR assessment
1. to 4. Targets	• Target excludes GHG emissions from Shell's Chemical business (we believe represents ~14-18 Mt of CO_2e). Our assessment assumes these will be largely scope 3. This is considered a relevant scope 3 emission for Shell. • We note that statements regarding Shell's targets appear caveated, i.e will be "in step with society". • No medium-term or short-term absolute GHG reduction targets, intensity targets only.
5. Decarbonisation strategy	• Business milestones are described, but not with sufficient quantification or clarity. • Heavily reliant on carbon-offsets (120mtpa nature-based solutions) and CCS (~25mptpa), needs to be limited and realistic. Not aligned with benchmark guidance that carbon offsets should be "avoided and limited". • No explicit green revenue targets only commitments for investment in renewables. • Shell's operating plans do not yet reflect its 2050 net zero target.
6. Capital allocation alignment	• Shell has not committed to align capital expenditure with emission reduction targets or the Paris agreement. • Carbon Tracker has found that at least 66% of Shell's capex is outside a beyond 2 °C scenario.
7. Climate policy engagement	• Shell measures industry alignment against six principles, including "energy transition" in which it considers natural gas as a key fuel, and use of "carbon sinks". • Unclear if Shell's current policies permit funding of public figures that have views not aligned with the Paris Agreement (we note reports of Shell in the 1990's funding climate science denier Frits Böttcher). • Influence Map rate Shell as a C-, noting it continues to advance for fossil fuel production and consumption. • Regarding net zero targets, Shell qualifies its use noting, "the nature and pace of change will vary between countries and regions, reflecting different types of economies and development priorities". • Shell's FY21 industry review was a large improvement on its FY20 report, citing specific action it would take from misalignment.
8. Climate governance	• Climate change director skills are unclear. Shell should conduct and disclose its board's skills matrix specifically identifying climate change skills needed by the board. • Key Performance Indicators should be linked to absolute emission reduction targets and not include targets to increase fossil-fuels (as included in Shell's LTIP, see Shell's climate transition plan commitments).
9. Just transition	• Shell should consider the societal impact from high reliance on Nature-Based Carbon offsets.
10. TCFD disclosure	• Scenario analysis of a 1.5°C scenario does not extend to key assumptions, risks and opportunities at a company level.

4. Climate vote assessment - Shell's plan against the ACCR voting guidelines

We review how Shell would be assessed against our draft ACCR 2021 climate vote guidelines for high carbon emitting sectors. As can be seen from the table below Shell would not be able to meet the key criteria, particularly Shell would need clear absolute emission reduction plans in the short (2025) and medium-term (2035).

ACCR 2021 climate vote guidelines: Shell

Targets and Strategy

Does the company have short-term (2025) and medium-term (2035) emissions reduction targets that meet the following criteria?

- Absolute ✗
- 95%+ of scope 1, 2, 3 emissions ✗
- Aligned with a 1.5 degree pathway ✗

For these targets and timeframes: ✗

- Identify and quantify actions leading to emissions reduction ✗
- Identify and quantify contribution of carbon offsets, CCS, divestments and avoided emissions ✗
- Commit to and demonstrate how capital expenditure is aligned ✗

Climate Lobbying

- Does the company obtain an InfluenceMap score of C+ or above? ✗

Climate Governance

- Is executive remuneration linked to the targets set out above? ✗

5. Shell's climate transition plan commitments

Royal Dutch Shell key climate commitments (changes from February).

Emission reduction targets

Indicator	Feb 2021	Apr 2021 (Energy Transition report)
Reduction target	Net Zero	No change
Year	2050	No change
Scope inclusion	1, 2, and 3 (energy business only). Excludes Chemicals business with relevant scope 3 emissions.	No change
Baseline	2016	No change
Reduction target	Intensity-based (g CO_2e/MJ).	No change
Scope inclusion	1,2, and 3 (energy business only).	No change
2022	3-4 %	No change
2023	6-8%	No change
2030	20%	No change
2035 (Medium Term)	45%	No change
2050 (Long Term)	100%	No change
Exclusions from targets	• Chemicals and lubricants business (relevant scope 3). • Emissions from producing fuel and transporting it to Shell assets (not expected to be material). • Trading activity that does not result in a physical product sale.	No change

Peak emissions

Indicator	Feb 2021	Apr 2021 (Energy Transition report)
Carbon emissions from energy sold	Expected to have peaked in 2018 at 1.7 Gt p.a.	No change
Oil production	Peaked in 2019	No change

Abatement

Indicator	Feb 2021	Apr 2021 (Energy Transition report)
Carbon Capture and Storage	25 million tonnes per year by 2035	No change
Carbon Capture and	Currently capacity 4.5 Mt (Quest in Canada, Northern Lights	No change

Storage	in Norway and Porthose in Netherlands)	
Nature Based Solutions	120 Mt a year by 2030	No change

Capital expenditure

Indicator	Feb 2021	Apr 2021 (Energy Transition report)
General statement	Shell will be setting carbon budgets for all businesses to drive investment decisions, reducing emissions.	.
Renewable Energy (Growth)	US$2-3bn p.a	No change
Marketing (Growth)	US$3bn p.a	No change
Upstream	US$8bn p.a	Shell states they are limiting investment in Upstream. "Our planned capital investment of US$8 billion in our Upstream business in the near term is well below the investment level required to offset the natural decline (5%p.a) in production of our oil and gas reservoirs, and will not sustain current levels of production."
Integrated gas (Transition)	US$4bn p.a	No change
Chemicals (Transition)	US$4-5bn p.a	No change

Decarbonisation strategy

Indicator	Feb 2021	Apr 2021 (Energy Transition report)
Operating efficiency	• Maintain methane emissions intensity <0.2% by 2025 • Eliminate routine flaring	No change
Growth Pillar: Low-carbon power (renewables)	• Increase electric vehicle charge points from 60,000 to ~500,000 by 2025 • >50 million households equivalent renewable power by 2030 • 560 terawatt hours of electricity a year by 2030, twice current amounts	No change
Growth Pillar: Low-carbon fuels (biofuels and hydrogen)	• Produce 8x more low-carbon fuels by 2030 • Double-digit share of global clean hydrogen by 2035	Potentially a new comment but not material: Increase low-carbon fuel sales to >10% of transport fuels

	• Developing integrated hydrogen hubs, aim to achieve double-digit share of global clean hydrogen sales	
Transition Pillar: Gas	• 7 Mt per annum of new capacity on-stream by 2025 (20% on FY20) • Share of gas to increase to 55% of hydrocarbon production in 2030.	No change
Upstream Pillar:	• 1-2% p.a reduction in oil production, including divestments and natural decline. • No new frontier exploration entries after 2025.	Additional insight: Shell will reduce annual spending on exploration from around US$2.2 billion in 2015 to around US$1.5 billion between 2021 and 2025.

Remuneration

Indicator	Feb 2021	Apr 2021 (Energy Transition report)
Incentives linked to climate transition	For FY21: • Executives Long Term Incentive Plan (LTIP) will be 20% weighted to Energy Transition (2022) emission intensity targets, as well as measures to drive future intensity reductions including from CCS and biofuels, and growing its power business (i.e increased gas). • Executives Annual Bonus will have a 15% weighting for Energy transition, including execution of Greenhouse Gas (GHG) abatement projects 5% and GHG emissions intensity targets for key lines of business 10%. • Awards for 16,500 staff under the Performance Share Plan will have a 20% weighting for energy transition.	Additional insight: The LTIP metric linked to commercialising biofuel technology will be broadened to measure growth in clean energy products. We note it is unclear how this is defined.

Governance and reporting

Area	Commitment
Climate engagement	• In FY21 Shell published a detailed review of 36 of its industry associations. An industry association review is published annually. • In its FY21 review Shell found material misalignment with the Queensland Resources Council, it will monitor its position and make a decision regarding its membership in October 2021.
Climate governance	• The Board is responsible for climate change risk. • The CEO and Executive Committee, and Executive Vice President, Safety & Environment, are the - most senior executives responsible for climate change.

	• Shell has linked Energy Transition to its annual bonus and LTIP for FY21. This includes performance against its near-term emission intensity targets, but also includes metrics to increase production of gas.
TCFD	TCFD supporter since 2017. TCFD disclosures provided in Shell Energy Transition report.