This paper sets out the approach applied by Danske Bank in assessing and addressing fossil fuel companies’ transition towards a low carbon economy.

Within the scope defined in our Position Statement on Fossil Fuels\textsuperscript{1} we apply a proprietary Net Zero Pathway Framework. The Net Zero Pathway Framework mainly builds on the methodology and data developed by the Transition Pathway Initiative (TPI). TPI is an open access global initiative, developed to enable investors to assess companies’ preparedness for transition towards a low-carbon economy. Assessments under the initiative are made using best-available data and publicly available company information, and an academically rigorous approach, which can be used to not only help inform investment decisions but also used as a basis for engagement with companies on their progress towards specific targets.

The TPI is today the most widely used transition assessment framework among European and Nordic asset managers and asset owners. Furthermore, TPI is in line with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Climate Action 100+ has decided to use TPI methodology and data as a core component of their corporate assessments and engagement priorities.

The TPI framework aims to evaluate what the transition to a low-carbon economy looks like for companies with a high impact on climate change, such as electricity utilities and oil & gas companies. It also aims to assess these companies’ progress towards a low-carbon transition.

TPI assesses companies within two dimensions:

1. **Management Quality**: TPI evaluates and tracks the quality of companies’ governance/management of their greenhouse gas emissions and of risks and opportunities related to the low-carbon transition.

2. **Carbon Performance**: TPI also evaluates companies’ carbon emissions against different climate scenarios consistent with the UN Paris Agreement. It does this by comparing companies in high-emitting sectors against each other and against sector-specific benchmarks, which establish the performance of an average company that is aligned with goals of the Paris Agreement.

TPI publishes the results of the analysis through an open access online tool hosted by the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (LSE). Investors are encouraged to use the data, indicators, and online tool to inform their investment research, decision making, engagement with companies, proxy voting and dialogue with fund managers and policy makers.

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\textsuperscript{1} https://danskebank.com/sustainability/publications-and-policies
Management Quality

Management Quality describes companies’ carbon management practices and governance, in other words their governance of greenhouse gas emissions and the risks and opportunities arising from the low-carbon transition. Management Quality indicators include, for example, whether a company has a climate-change policy in place, to what extent it discloses its emissions, and whether the company has allocated board responsibility for climate change.

Companies tend to implement their carbon management systems and processes in a relatively staged and structured manner. Therefore, it makes sense to assess the management quality. Some companies are still at an early stage of establishing carbon management and reporting processes, whereas others have assessed the resilience of their businesses and business models to a range of future low-carbon scenarios, published details of their low-carbon research and development and investment strategies, and aligned their strategic key performance indicators on climate change with their executive incentives. Up to around 20 specific Management Quality indicators/questions are used to map companies on to these five levels.

TPI’s Management Quality framework tracks the progress of companies through the following five levels:

- **Level 0** – Unaware of (or not Acknowledging) Climate Change as a Business Issue.
- **Level 1** – Acknowledging Climate Change as a Business Issue: the company acknowledges that climate change presents business risks and/or opportunities, and that the company has a responsibility to manage its greenhouse gas emissions. This is often the point where companies adopt a climate change policy.
- **Level 2** – Building Capacity: the company develops its basic capacity, its management systems and processes, and starts to report on practice and performance.
- **Level 3** – Integrating into Operational Decision-Making: the company improves its operational practices, assigns senior management or board responsibility for climate change and provides comprehensive disclosures on its carbon practices and performance.
- **Level 4** – Strategic Assessment: the company develops a more strategic and holistic understanding of risks and opportunities related to the low-carbon transition and integrates this into its business strategy and capital expenditure decisions.
- **Level 4Star** – Leaders: The company is a leader when it comes to strategically incorporating risks and opportunities arising from the low-carbon transition.

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2 TPI has released a methodology and data update in November 2023, adding Level 5 category which tests companies whether they have transition plans that include defined, quantified and financed actions to get to net zero. In relation to this, the number of indicators in TPI’s MQ framework has been increased from 19 to 23.
Carbon Performance

TPI’s Carbon Performance assessment is based on the Sectoral Decarbonization Approach (SDA). The SDA translates greenhouse gas emissions targets made at the international level (e.g. under the Paris Agreement to the UN Framework Convention on Climate Change) into appropriate benchmarks, against which the performance of individual companies can be compared.

The Sectoral Decarbonization Approach (SDA) is a scientifically informed method for companies to set greenhouse gas reduction targets necessary to stay within a 2°C temperature rise above preindustrial levels. The method is based on the 2°C scenario; one of the International Energy Agency’s detailed CO2 sector scenarios modelled in their 2014 Energy Technology Perspectives report. The Energy Technology Perspectives report’s budget is consistent with the representative concentration pathway 2.6 (RCP2.6) scenario from the IPCC’s Fifth Assessment Report, which gives the highest likelihood of staying within the global target temperature of less than 2°C in the year 2100. The IEA 2°C scenario estimates an overall carbon budget of 1,055 GtCO2 up to 2050.

The SDA is different from other existing methods by virtue of its subsector-level approach and global least-cost mitigation perspective. SDA results and assumptions are based on mitigation potential and cost data from the IEA’s TIMES model 2°C scenario, which identifies the least-cost technology mix available to meet final demand for industry, transport, and buildings services. The SDA is intended to help companies in homogenous, energy intensive sectors align their emissions reduction targets with a global 2°C pathway.

The SDA method was developed by the Science Based Target initiative together with its partners CDP, WRI, & WWF with technical support from Ecofys.

Based on Carbon Performance, it is possible to estimate the temperature rise scenarios associated with each company based on its implicit carbon budget.

The global carbon budget is allocated across time and to different regions and industrial sectors. In order to compare companies of different sizes, sectoral emissions are normalized by a relevant measure of sectoral activity (e.g. physical production, economic activity). This results in a benchmark path for emissions intensity in each sector. Companies’ recent and current emissions intensity are calculated, and their future emissions intensity can be estimated based on emissions targets they have set (i.e., this assumes companies exactly meet their targets).

Using Carbon Performance, companies can be grouped into various different climate alignment scenarios:

- 1.5 Degrees
- Below 2 Degrees
- National Pledges
- Paris Pledges
- International Pledges
- Not aligned / no or unsuitable disclosure
Overall Net Zero Pathway assessment

Our Net Zero Pathway framework builds on Management Quality and Carbon Performance, adding a proprietary dimension of combining the two assessments, which enables us to place each company into one of the following categories\(^3\), each representing degree and strength of overall net zero alignment:

- Achieving net zero (not applicable in the model currently)
- Aligned to net zero pathway
- Aligning toward net zero pathway
- Committed towards net zero pathway
- Not aligned / not transitioning to net zero

If a company is deemed to be either achieving net zero, aligned to net zero pathway or aligning toward net zero pathway the company is investable. For the companies that are deemed to be aligned to net zero pathway we will continue to monitor their progress, whereas for companies that are aligning toward net zero pathways we will setup time-bound engagement objectives that may be individual objectives based on the company. Companies that are deemed to be committed towards net zero pathway and not transitioning to net zero are excluded from the investment universe. We will continuously screen companies’ climate progress, which also means that the framework is in nature dynamic i.e. if companies’ management quality and/or their carbon performance over time decline the company will be excluded and vice versa if the company is improving its climate efforts it will be investable.

In summary, the net-zero pathway assessment and the corresponding actions are as follows:

<table>
<thead>
<tr>
<th>Management Quality vs Carbon Performance</th>
<th>4STAR</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0 - N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5'C</td>
<td>Aligned to net zero pathway</td>
<td>Aligned to net zero pathway</td>
<td>Aligning toward net zero pathway</td>
<td>Committed towards net zero pathway</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
</tr>
<tr>
<td>Below 2'C</td>
<td>Aligned to net zero pathway</td>
<td>Aligning toward net zero pathway</td>
<td>Aligning toward net zero pathway</td>
<td>Committed towards net zero pathway</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
</tr>
<tr>
<td>Below 2.5'C</td>
<td>Aligning toward net zero pathway</td>
<td>Aligning toward net zero pathway</td>
<td>Committed towards net zero pathway</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
</tr>
<tr>
<td>Above 2.5'C</td>
<td>Committed towards net zero pathway</td>
<td>Committed towards net zero pathway</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
</tr>
<tr>
<td>N/A</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
<td>Not aligned / not transitioning to net zero</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aligned to net zero pathway</td>
<td>Progress continuously monitored</td>
</tr>
<tr>
<td>Aligning toward net zero pathway</td>
<td>Subject to time-bound engagement</td>
</tr>
<tr>
<td>Committed towards net zero pathway</td>
<td>Excluded</td>
</tr>
<tr>
<td>Not aligned / not transitioning to net zero</td>
<td>Excluded</td>
</tr>
</tbody>
</table>

\(^3\) These alignment categories are based on the Net Zero Investment Framework (NZIF), developed by the Paris Aligned Investment Initiative (PAII).
Data

We leverage data from multiple sources mapped to Management Quality and Carbon Performance frameworks to achieve broad coverage of company assessments.

As mentioned, the SDA is built on the principle of recognizing that different sectors of the economy [e.g., oil and gas production, electricity generation and automobile manufacturing] face different challenges arising from the low-carbon transition, including where emissions are concentrated in the value chain, and how costly it is to reduce emissions. This means that the requirements will differ from company to company and will impact how the companies are categorized. If quantitative data is missing, then a qualitative assessment can be made on the categorization. Furthermore, we have grouped Carbon Performance assessments into five categories:

- 1.5°C
- Below 2°C
- Below 2.5°C
- Above 2.5°C
- N/A [data missing]

The framework incorporates additional criterion for specific activities. As a general rule, companies with the following characteristics are assessed as “not aligned” and subject to exclusion:

- Upstream Oil & Gas companies that have IEA NZE expansion overshoot >5%
- Upstream Oil & Gas companies fossil fuel expansion activities of at least USD 5 million after 2021
- Utilities and mining companies linked to thermal coal expansion activities after 2021.

The framework further incorporates criterion relating to renewable energy capacity and EU-taxonomy aligned CapEx:

- Companies that have >50% renewable energy capacity are assessed as “aligning towards net zero” unless linked to expansion/overshoot.
- Companies that have >50% EU taxonomy-aligned CapEx are assessed as “aligning towards net zero” unless linked to expansion/overshoot.

Extra emphasis is given to companies that meet the highest management quality criteria, as we believe there is an opportunity for meaningful time-bound engagement with such companies. Companies with the highest management quality criteria can be assessed as “Aligning to net zero pathway” despite expansion activities and/or IEA NZE expansion overshoot >5%.

4 "Defined as “4STAR” management assessment by TPI’s framework."
DISCLAIMER:

The model incorporates elements/data sets that are based on an extensive set of estimations. The model incorporates elements and data sets that are to some extent based on assumptions. As such, Danske Bank reserves the right to deviate from the model results and take other relevant information into account.

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