Business Development Lizenz / Training Material

Modul 2 / Video 5 **Topic: Understanding emissions reductions on the path to the 1.5 degree target**

Questions

1) **If there is no GVA growth entered in the "Growth Scenario" Tab – how do the emissions in Baseline Scenario compare to that of the emissions in growth scenario?**

   a) Emissions in Baseline Scenario are greater than emissions in growth scenario.
   b) Emissions in Baseline Scenario are equal to emissions in growth scenario.
   c) Emissions in Baseline Scenario are less than emissions in growth scenario.

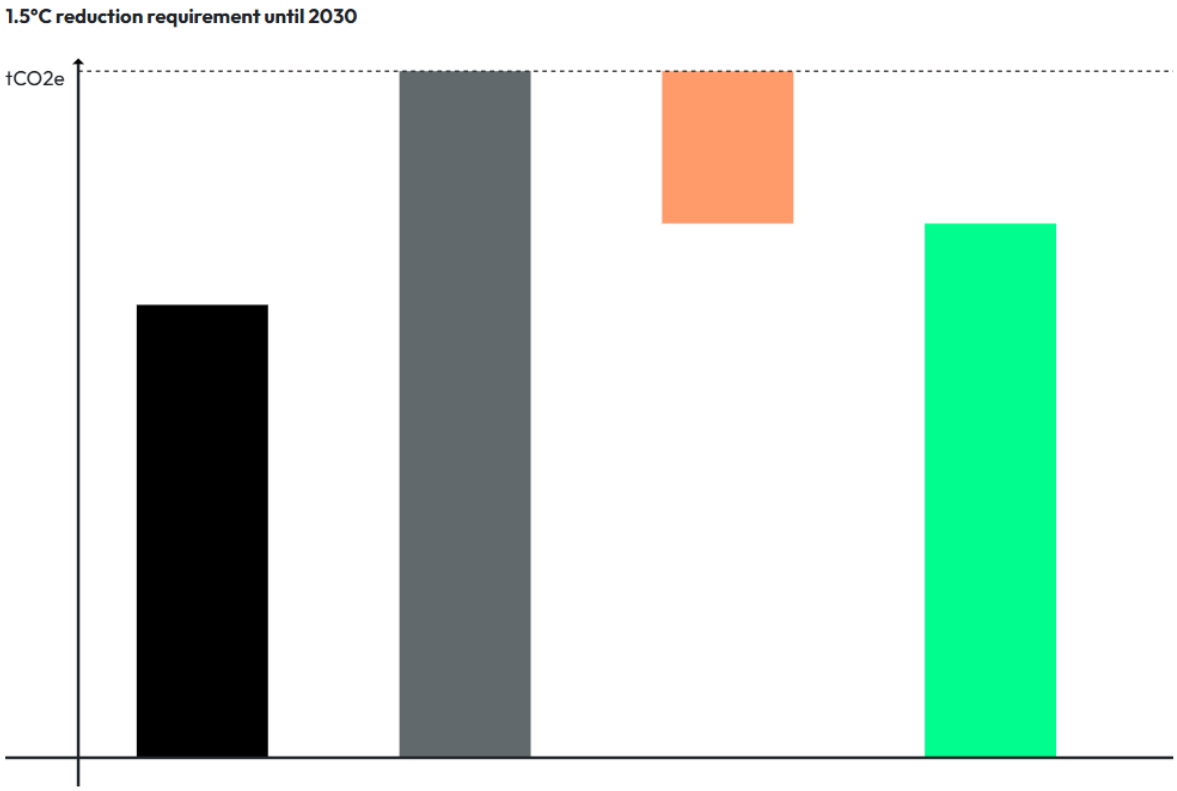
2) **The 1.5°C emissions budget chart in the Reduction Need tab is linked to what emissions:**

   a) The emissions in the baseline scenario.
   b) The emissions in the growth scenario.
   c) The emissions including the reduction measures.

3) **The concept of a budget getting a higher carbon budget due to their rapid financial growth is linked to which important concept:**

   a) The decoupling of emissions and GVA.
   b) Net zero.
   c) Green growth.

4) If we wanted to visually represent the amount of emissions needed to be reduced in the Baseline scenario using the chart below, how would we describe it?



a) The difference between the black bar and green bar.
b) The difference between the grey bar and the green bar.
c) Not enough information is provided to draw a conclusion.

5) If the emissions in the Baseline scenario are greater than those of the 1.5°C emissions budget, what can we say about the Baseline XDC?

a) The Baseline XDC is less than 1.5°C
b) The Baseline XDC is equal to 1.5°C.
c) The Baseline XDC is greater than 1.5°C.

6) If for a particular scope, the Climate Explorer displayed that you were over budget by -1000 tons CO2e. How many tons of emissions would need to be reduced to be just at the 1.5°C budget for this scope?

a) 1000 tons could be emitted and still be just at the 1.5°C budget.
b) The company is already at the 1.5°C budget.
c) 1000 tons needs to be reduced to just meet the 1.5°C budget.

7) If this is the result, would reducing emissions by 300,000 tons each year put a company on a 1.5°C aligned pathway in 2030?

a) Yes.
b) No.

Based on the applied growth assumptions, your company's growth in the period between 2022 and 2030 will result in an emission output across scopes 1-3 of:	12,414,356 tCO2e
For scope 1, this results in emissions of:	3,040,251 tCO2e
For scope 2, this results in emissions of:	253,354 tCO2e
For scope 3, this results in emissions of:	9,120,752 tCO2e
For scopes 1-3, your company's 1.5°C emission budget until 2030 is:	8,561,544 tCO2e
In scope 1, the 1.5°C emission budget until 2030 is:	2,087,649 tCO2e
In scope 2, the 1.5°C emission budget until 2030 is:	166,848 tCO2e
In scope 3, the 1.5°C emission budget until 2030 is:	6,307,047 tCO2e
By 2030, your company's emissions in scopes 1-3 must reduce by:	3,852,813 tCO2e
By 2030, you must reduce emissions in scope 1 by:	952,601 tCO2e
By 2030, you must reduce emissions in scope 2 by:	86,507 tCO2e
By 2030, you must reduce emissions in scope 3 by:	2,813,705 tCO2e
Average annual reduction by 2030 needed to meet the 1.5°C target:	481,601 tCO2e

8) Does Scope 1 have very high, very low, or relatively comparable emissions compared to other companies in the sector?

a) Scope 1's emissions are very high compared to the sector.
b) Scope 1's emissions are relatively comparable compared to the sector.
c) Scope 1's emissions are very low compared to the sector.

Scope	Indication	Compared to other companies in the sector your emissions in the respective scope are unusually
2	▲	high
3.2	▲	high
3.4	▲	high
3.5	▲	high
3.6	▲	high
3.7	▲	high
3.8	▲	high
3.9	▲	high
3.10	▲	high
3.12	▲	high
3.14	▲	high

Answers

1) **If there is no GVA growth entered in the "Growth Scenario" Tab – how do the emissions in Baseline Scenario compare to that of the emissions in growth scenario?**

   a) Emissions in Baseline Scenario are greater than emissions in growth scenario.
   b) Emissions in Baseline Scenario are equal to emissions in growth scenario.
   c) Emissions in Baseline Scenario are less than emissions in growth scenario.

   If there is no growth scenario, than the emissions listed will be exactly the same as the Baseline scenario. If the user enters GVA that is higher than the Baseline Scenario, the emissions in the growth scenario will increase, as emissions are also assumed to increase given the GVA growth assumptions.

2) **The 1.5°C emissions budget chart in the Reduction Need tab is linked to what emissions:**

   a) The emissions in the baseline scenario.
   b) The emissions in the growth scenario.
   c) The emissions including the reduction measures.

   The 1.5°C emissions budget is linked to the emissions in the growth scenario. So if the GVA is expected to grow much higher than the SSP2 growth rates, the 1.5°C emissions budget displayed can be higher than the baseline emissions, since the increase in GVA means that the company is allocated a higher emissions budget.

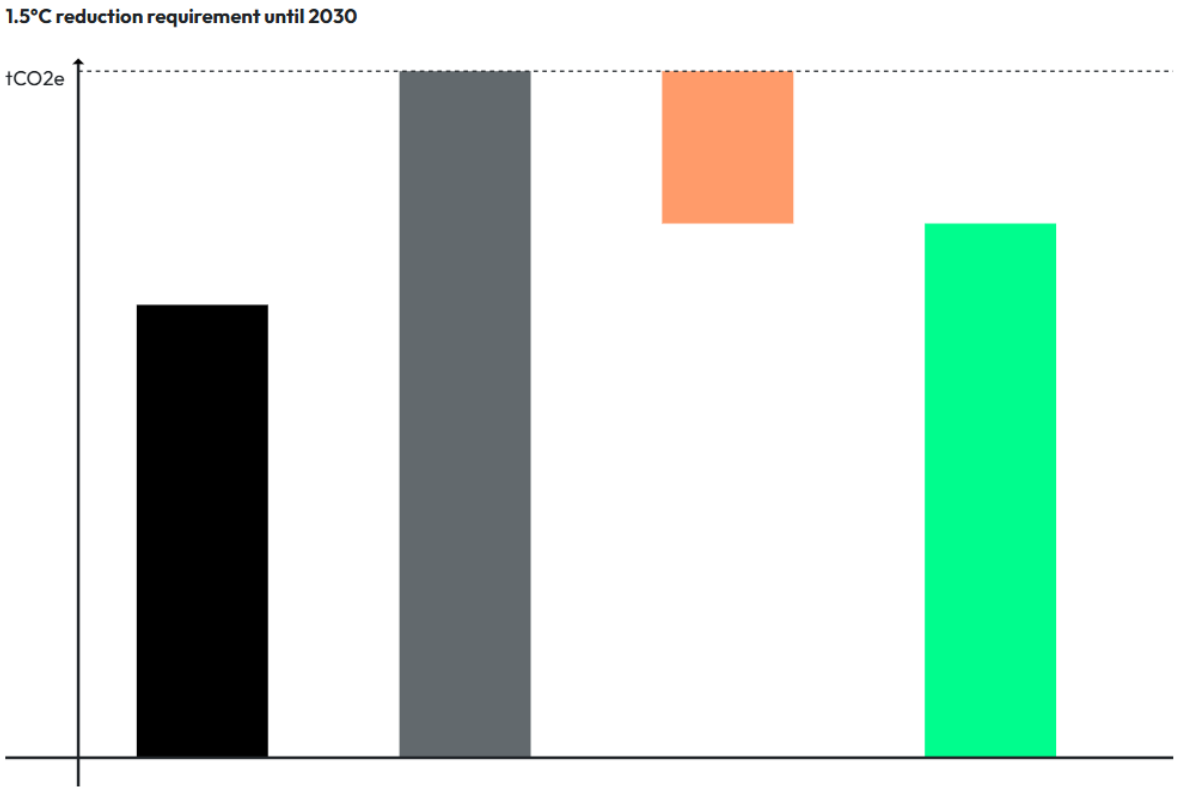
3) **The concept of a budget getting a higher carbon budget due to their rapid financial growth is linked to which important concept:**

   a) The decoupling of emissions and GVA.
   b) Net zero.
   c) Green growth.

   As a company grows larger, it is only right that they get allocated a larger emissions budget. If a company were to grow very large in a small amount of time, it wouldn't make any sense to stick them with the carbon budget that they had as a small company.

   A company can grow their emissions for a time and still be 1.5°C aligned if they grow their GVA much faster than their emissions. This happens because while the emissions grow, the budget grows even faster, allowing them to be 1.5°C aligned.

4) If we wanted to visually represent the amount of emissions needed to be reduced in the Baseline scenario using the chart below, how would we describe it?



a) The difference between the black bar and green bar.
b) The difference between the grey bar and the green bar.
c) Not enough information is provided to draw a conclusion.

It is tempting to choose a – but this chart does not display the emissions budget for a baseline scenario – it is for the growth scenario. However, this means that b is incorrect, as this is 1.5°C alignment for the growth scenario. This only leaves c – there is not enough information here to make a determination. This needs to be done on the status quo page.

5) If the emissions in the Baseline scenario are greater than those of the 1.5°C emissions budget, what can we say about the Baseline XDC?

a) The Baseline XDC is less than 1.5°C
b) The Baseline XDC is equal to 1.5°C.
c) The Baseline XDC is greater than 1.5°C.

If a company exceeds its 1.5°C carbon budget, then they are not 1.5°C aligned, the Baseline XDC must therefore be higher than 1.5°C.

6) **If for a particular scope, the Climate Explorer displayed that you were over budget by -1,000 tons CO2e. How many tons of emissions would need to be reduced to be just at the 1.5°C budget for this scope?**

a) **1,000 tons could be emitted and still be just at the 1.5°C budget.**
b) The company is already at the 1.5°C budget.
c) 1,000 tons needs to be reduced to just meet the 1.5°C budget.

To just meet the budget, 1,000 tons would have to be emitted. However, having a Baseline XDC of under 1.5°C does not mean that it is suggested that a company emit more. It's only that to be just at the budget, one could emit more, assuming the company achieves the necessary GVA growth.

7) **If this is the result, would reducing emissions by 300,000 tons each year put a company on a 1.5°C aligned pathway in 2030?**

a) Yes.
b) No.

On average, this company needs to reduce 481,601 tons of emissions per year – so an annual reduction of 300,000 tons would not be enough to put them on 1.5°C pathway in 2030.

Based on the applied growth assumptions, your company's growth in the period between 2022 and 2030 will result in an emission output across scopes 1-3 of:	12,414,356 tCO2e
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8) **Does Scope 1 have very high, very low, or relatively comparable emissions compared to other companies in the sector?**

a) Scope 1's emissions are very high compared to the sector.
b) Scope 1's emissions are relatively comparable compared to the sector.
c) Scope 1's emissions are very low compared to the sector.

While a number of scopes and subscopes have very high emission when compared to the sector, Scope 1 has neither very low nor very high emissions.

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