

Business Development Lizenz / Training Material

Modul 1 / Video 1 **Topic: Introduction to the XDC model**

Questions

- 1) What grows at a higher rate during the calculation of the Baseline XDC – emissions or GVA?**
 - a) Emissions.
 - b) GVA.
 - c) They both grow at the same rate.

- 2) How does the Economic Emissions Intensity (EEI) evolve over time with the Baseline XDC?**
 - a) EEI increases.
 - b) EEI decreases.
 - c) The EEI stays flat over time.

- 3) If the company being analyzed has a higher EEI than the sector median EEI for a given sector, which company would have a higher Baseline XDC?**
 - a) The company being analyzed.
 - b) The median company in the sector.

- 4) How does changing from IEA to either OECM or NGFS affect the growth rates of emissions and GVA?**
 - a) Both rates increase.
 - b) Both rates decrease.
 - c) Emissions rate increases and the GVA rate decreases.
 - d) Emissions rate decreases and the GVA rate increases.
 - e) Neither rate changes.

- 5) If the EEI curve for an analyzed company is always higher than the 1.5°C-aligned curve, what would we expect to see when comparing the emissions to the 1.5°C-aligned curve for a Baseline XDC?**
 - a) The emissions would be higher than the 1.5°C-aligned emissions curve.

- b) The emissions would be lower than the 1.5°C-aligned emissions curve.
 - c) There's not enough information to make a decision.
- 6) In a Scenario XDC, are the growth rates for GVA and emissions higher or lower than the Baseline XDC?**
- a) Both growth rates must be higher.
 - b) Both growth rates must be lower.
 - c) One rate must be higher, and the other must be lower.
 - d) There are no set rules on the growth rates.
- 7) In a Scenario XDC, do the sector benchmarks change?**
- a) Yes.
 - b) No.
- 8) If an analyzed company has a Baseline EEI higher than the 1.5°C aligned pathway for all years, but the Scenario EEI is below the 1.5°C pathway for all years, the Scenario XDC is...**
- a) Higher than 1.5°C.
 - b) At 1.5°C.
 - c) Lower than 1.5°C.
- 9) If for a given company, they had a scenario with a higher GVA growth rate and lower emissions growth rate, compared to the Baseline growth assumptions, the EEI for the scenario would be...**
- a) Higher than the EEI of the company in the Baseline scenario.
 - b) Equal to the EEI of the company in the Baseline scenario.
 - c) Lower than the EEI of the company in the Baseline scenario.
- 10) If for a given scenario, the emissions go down to zero in 2050. Is the Scenario XDC going to be 1.5°C?**
- a) Yes.
 - b) No.
 - c) There's not enough information to make a decision.

Answers

1) What grows at a higher rate during the calculation of the Baseline XDC – emissions or GVA?

- a) Emissions.
- b) GVA.**
- c) They both grow at the same rate.

The GVA grows at a higher rate than emissions. This is what is meant by the decoupling of emissions and GVA – they both grow at different rates.

2) How does the Economic Emissions Intensity (EEI) evolve over time with the Baseline XDC?

- a) EEI increases.
- b) EEI decreases.**
- c) The EEI stays flat over time.

The EEI is the emissions divided by GVA, i.e. $\text{emissions} / \text{GVA}$. Since over time, the GVA grows at a higher rate than the emissions, the denominator grows larger than the numerator. This means that the EEI will decrease in time, even though emissions are increasing.

3) If the company being analyzed has a higher EEI than the sector median EEI for a given sector, which company would have a higher Baseline XDC?

- a) The company being analyzed.**
- b) The median company in the sector.

We can think of this as the analyzed company is emitting more per Euro of GVA created than the median company of a sector. Given this, we would expect the analyzed company to have a higher Baseline XDC.

4) How does changing from IEA to either OECM or NGFS affect the growth rates of emissions and GVA?

- a) Both rates increase.
- b) Both rates decrease.
- c) Emissions rate increases and the GVA rate decreases.
- d) Emissions rate decreases and the GVA rate increases.
- e) Neither rate changes.**

Changing from IEA to OECM or NGFS affects the carbon budget for a particular sector. The resulting change can affect the Baseline XDC positively or negatively. However, only the carbon budget is affected. The growth rates of both emissions and GVA stay the same.

5) If the EEI curve for an analyzed company is always higher than the 1.5°C-aligned curve, what would we expect to see when comparing the emissions to the 1.5°C-aligned curve for a Baseline XDC?

- a) The emissions would be always higher than the 1.5°C-aligned emissions curve.**
- b) The emissions would be always lower than the 1.5°C-aligned emissions curve.
- c) The emissions curve would sometimes be lower than the 1.5°C-aligned emissions curve.
- d) There's not enough information to make a decision.

The EEI curve and the emissions curve used for a Baseline XDC always tell a consistent story. If a company's EEI is always over the 1.5°C-aligned EEI, when we upscale to the global emissions, the company's emissions would also therefore always be over the 1.5°C emissions curve.

6) In a Scenario XDC, are the growth rates for GVA and emissions higher or lower than the Baseline XDC?

- a) Both growth rates must be higher.
- b) Both growth rates must be lower.
- c) One rate must be higher, and the other must be lower.
- d) There are no set rules on the growth rates.**

The growth rates for GVA and emissions are set by the user, they can be whatever the user desires. Both rates can be higher than the Baseline assumptions, lower, one can be higher – both can even be flat. There are no rules or restrictions when applying growth rates.

7) In a Scenario XDC, do the sector benchmarks change?

- a) Yes.
- b) No.**

The benchmarks used in the calculation of the Baseline XDC are the same as those for the Scenario XDC. Just because the growth rates applied have changed, does not mean that the benchmarks themselves have changed.

8) If an analyzed company has a Baseline EEI higher than the 1.5°C aligned pathway for all years, but the Scenario EEI is below the 1.5°C pathway for all years, the Scenario XDC is...

- a) Higher than 1.5°C.
- b) At 1.5°C.
- c) Lower than 1.5°C.**

The Baseline XDC is irrelevant to the Scenario XDC. Just because the Baseline XDC is higher than 1.5°C does not disqualify a scenario from being 1.5°C aligned.

9) If for a given company, they had a scenario with a higher GVA growth rate and lower emissions growth rate, compared to the Baseline growth assumptions, the EEI for the scenario would be...

- a) Higher than the EEI of the company in the Baseline scenario.
- b) Equal to the EEI of the company in the Baseline scenario.
- c) Lower than the EEI of the company in the Baseline scenario.**

Having a higher GVA growth rate than the Baseline growth rate would mean a lower EEI, all else equal. Having lower emissions growth would also mean a lower EEI, all else equal. Putting these both together, the EEI with scenario assumptions would have to be lower than the EEI with Baseline assumptions.

10) If for a given scenario, the emissions go down to zero in 2050. Is the Scenario XDC going to be 1.5°C?

- a) Yes.
- b) No.
- c) There's not enough information to make a decision.**

While the goal of net zero emissions is nice, this does not necessarily mean a company's Scenario XDC will be lower than or even at 1.5°C.

The starting point of a company matters, if a company has a very high EEI relative to the sector, getting to zero at 2050 may not be a fast enough drop to warrant a Scenario XDC of 1.5°C.

Even if a company had a great starting point, we do not know what's happening from the base year and 2049. Yes, the emissions are zero at 2050, but if the emissions are high (relative to GVA for a sector) until then, it is unlikely that the company's scenario will be 1.5°C aligned.

While zero emissions are welcomed, this does not automatically mean that a company is 1.5°C aligned.