

SIDE EVENT - FIRST PART

Equity-based study of the current NDCs

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Objectives

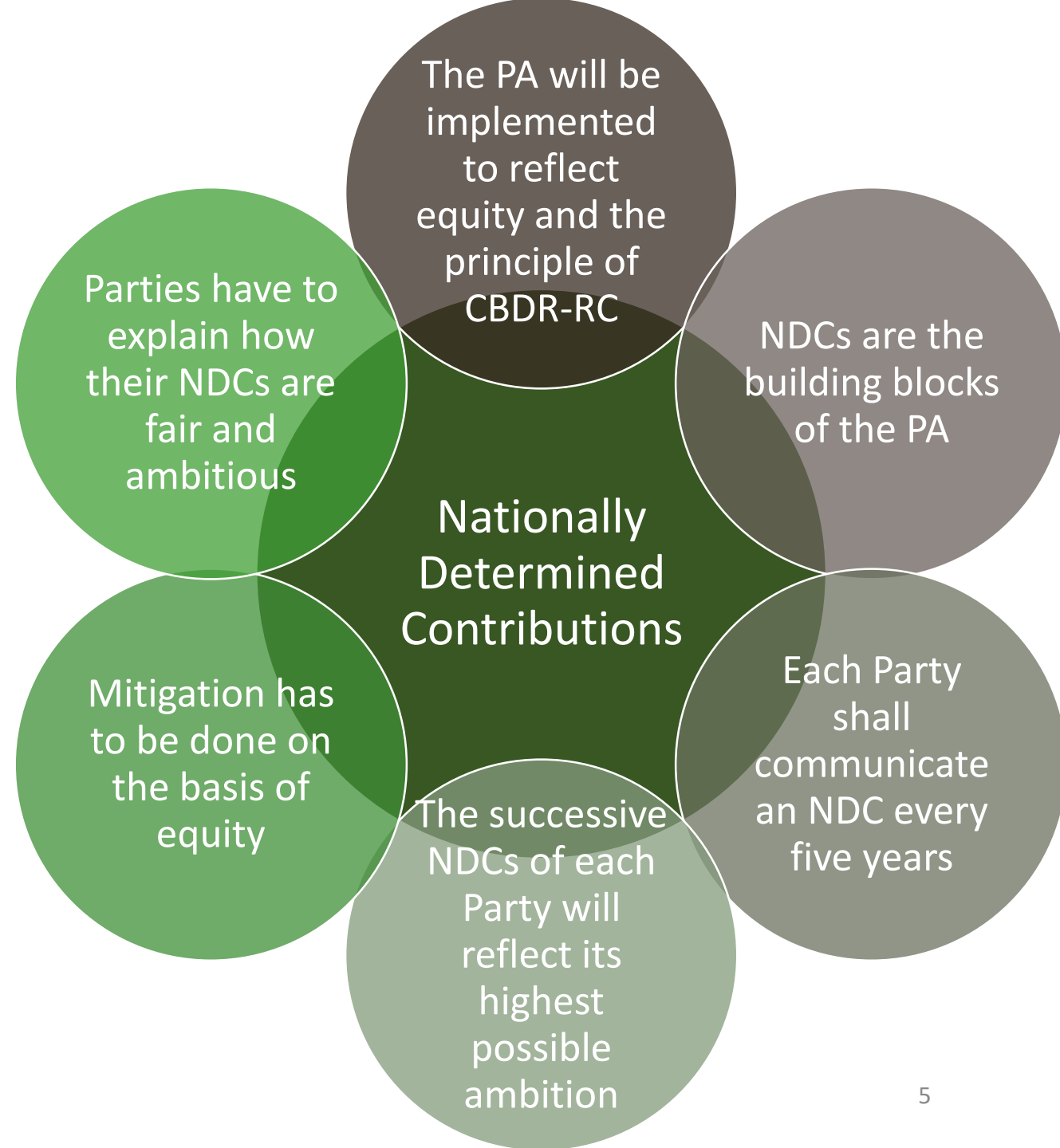
- To analyze the part of the **Remaining Global Carbon Budget** that will be released into the atmosphere from 2020 to 2030 when implementing the NDCs presented as at 31 July 2021.
- To make an **equity-based study** on the distribution among different groups of countries of the cumulative emissions that NDCs implies from 2020 to 2030.

The Remaining Global Carbon Budget

- The term **Global Carbon Budget** refers to the maximum amount of cumulative net global anthropogenic CO₂ emissions that would result in limiting global warming to a given level with a given probability.
- The **Remaining Global Carbon Budget** is the total quantity of CO₂ emissions, or cumulative emissions, that could still be emitted while keeping warming below a specific temperature level.
- According to the Sixth Assessment Report published by the IPCC, the global carbon budget compatible with the goal of limiting the global temperature increase to 1.5 °C, with a 67% probability, amounts to **400 GtCO₂**.

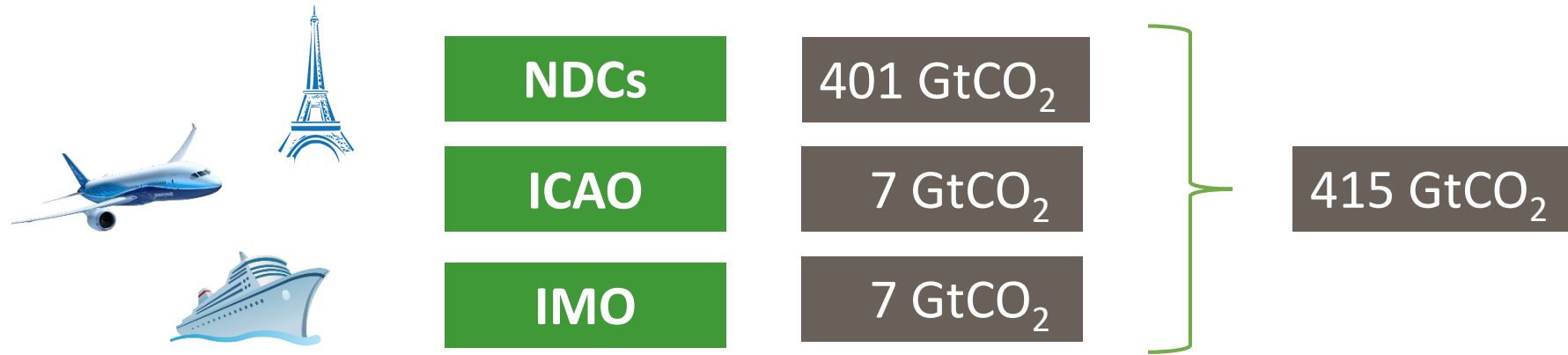
The NDC context

1. We analyse the ambition of the aggregated effect of the NDCs by comparing the cumulative emissions they imply with the remaining global carbon budget.
2. We present our equity based analysis comparing the share of the remaining carbon budget that the NDCs of different groups of countries imply.

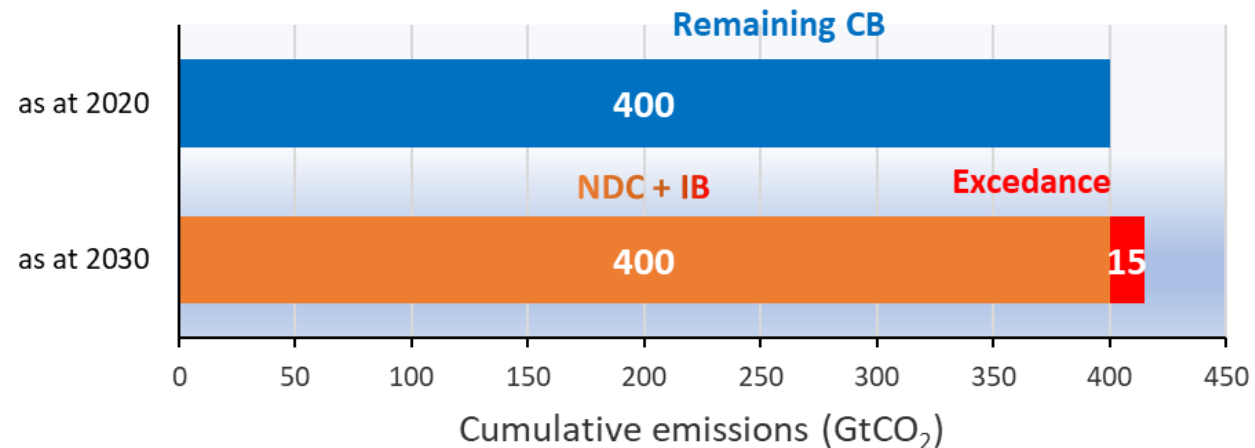


Consumption of the GCB by 2030

Cumulative CO₂ emissions that will be released into the atmosphere between 2020 and 2030, according to:



Remaining carbon budget for keeping warming to below 1.5°C with 67% likelihood



Equity in mitigation

Key dimensions of equity in mitigation (AR5, IPCC 2014)

EQUALITY

The same emissions per capita for everybody

RESPONSIBILITY

The historical contribution to the problem

CAPACITY

We demand more from those who can do more

THE RIGHT TO SUSTAINABLE DEVELOPMENT

All countries must meet their basic requirements. Climate change should not be a threat for their sustainable development

Equity-based analysis of the current NDCs

1.



NDCs

401 GtCO₂

How are these 401 GtCO₂ distributed among different groups of countries?

Three groupings of countries

According to their income level

Annex I versus Non-Annex I

Geographical location (continent)

2.

Can we consider the distribution of the cumulative 2020-2030 emission distribution equitable?

Percentual distribution of the 1990 - 2018 historical emissions

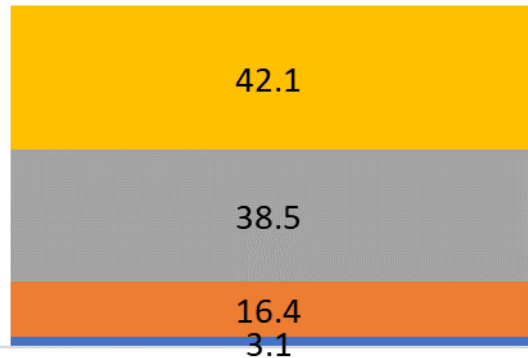
Percentual distribution of the 2020-2030 cumulative emissions according to unconditional NDCs

Share in the 2020 global population

Grouping with respect to the income level

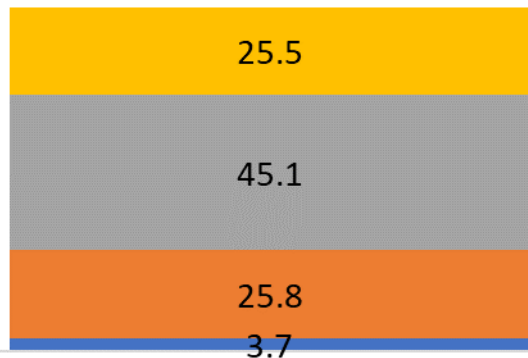


Percentual distribution of the 1990 - 2018 historical emissions



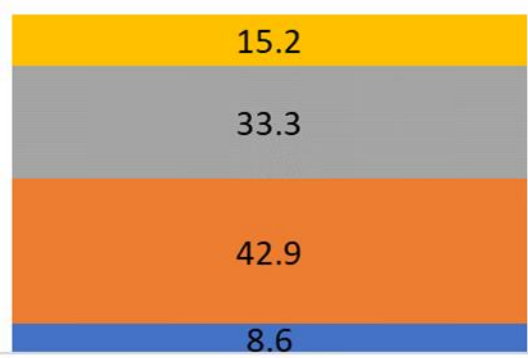
Historical emissions 1990-2018 (%)

Percentual distribution of the 2020-2030 cumulative emissions according to unconditional NDCs



Cumulative emissions 2020-2030 according to inc. NDCs (%)

Share in the 2020 global population



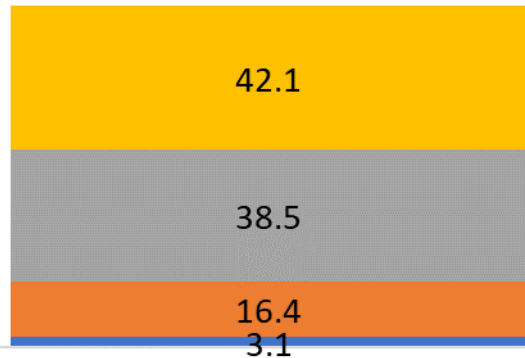
Population 2020 (%)

CAPACITY: Income level

Grouping with respect to the income level

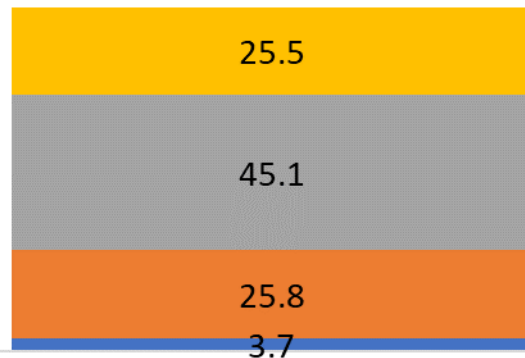


Percentual distribution of the 1990 - 2018 historical emissions



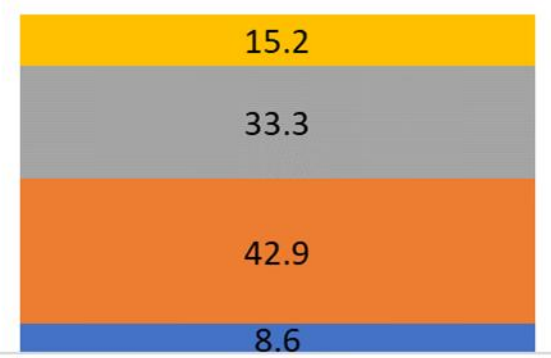
Historical emissions 1990-2018 (%)

Percentual distribution of the 2020-2030 cumulative emissions according to unconditional NDCs



Cumulative emissions 2020-2030 according to inc. NDCs (%)

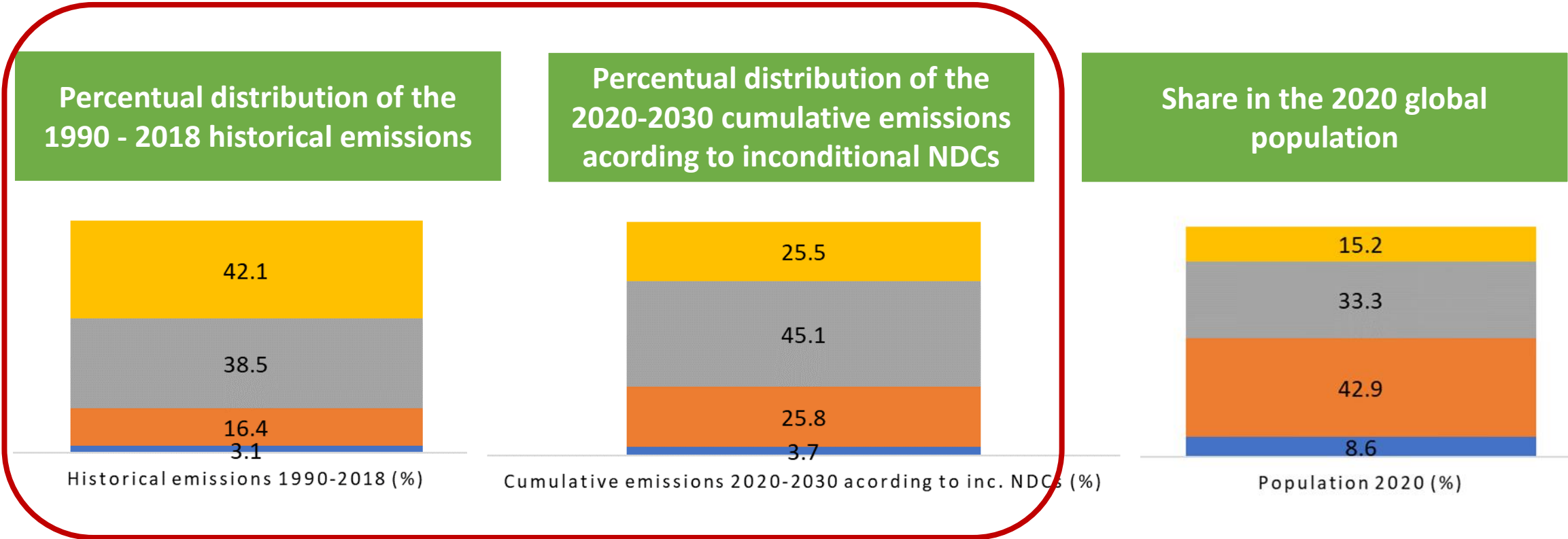
Share in the 2020 global population



Population 2020 (%)

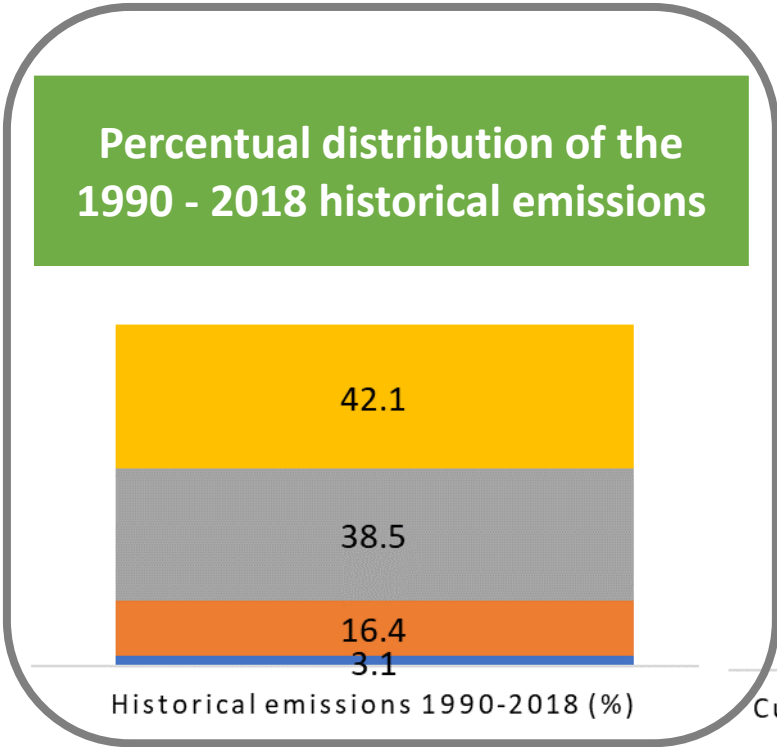
EQUALITY: Emissions per capita

Grouping with respect to the income level

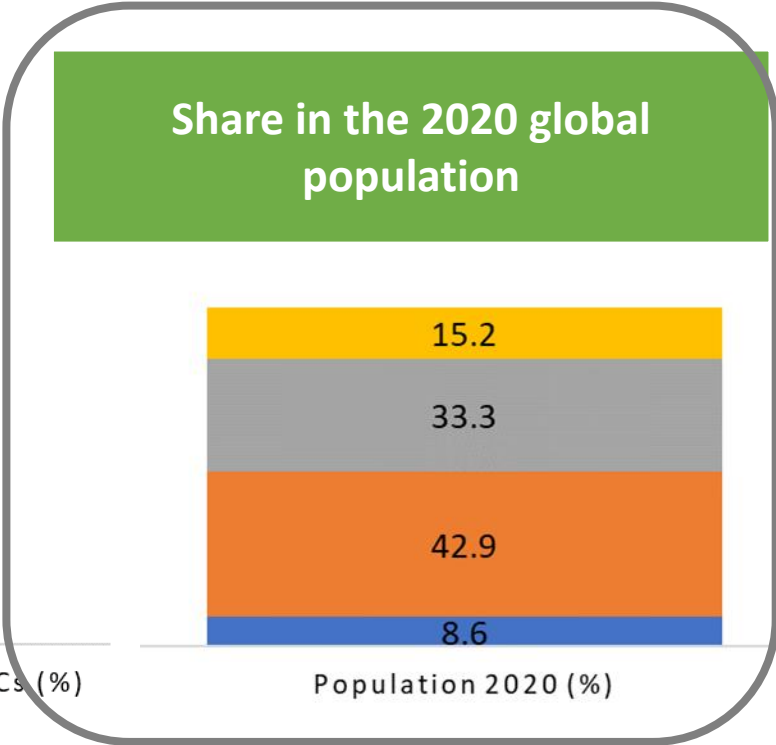
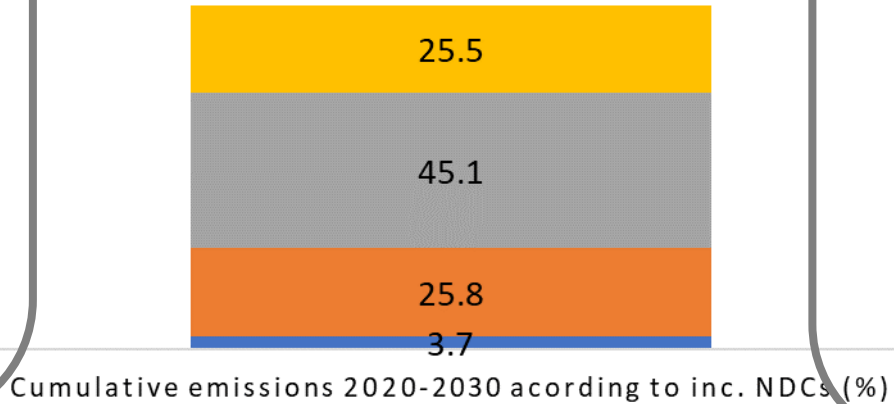


The comparison between historical and future emissions allows us to visualize the evolution on the share of emissions according to current NDCs.

Grouping with respect to the income level

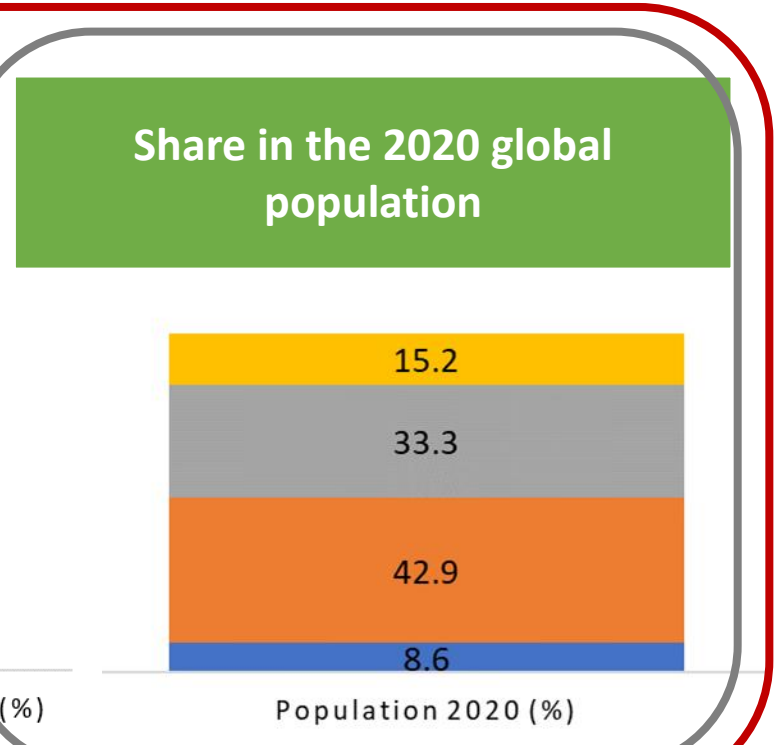
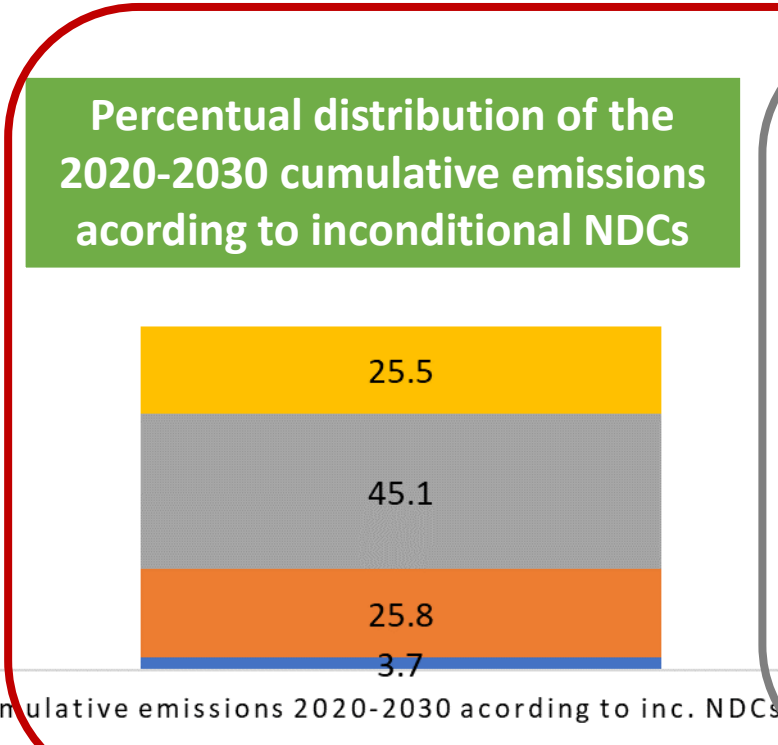
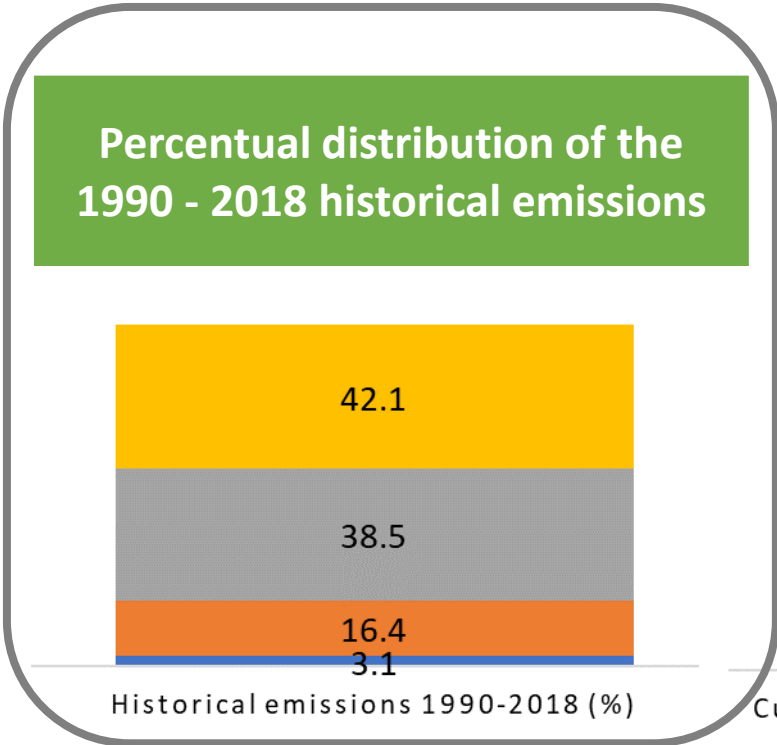


Percentual distribution of the 2020-2030 cumulative emissions according to unconditional NDCs



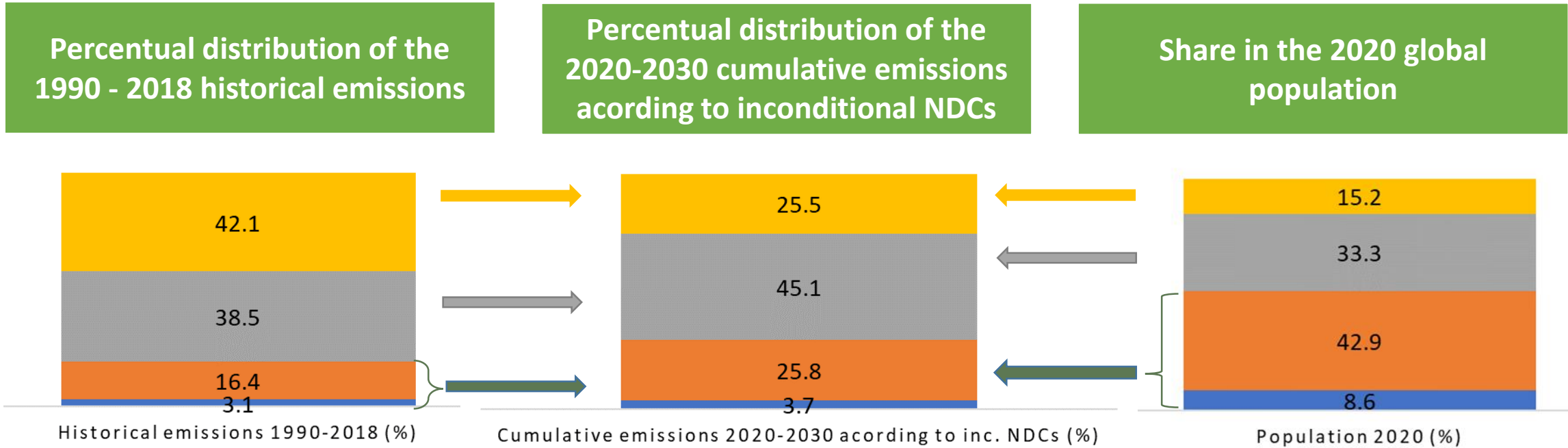
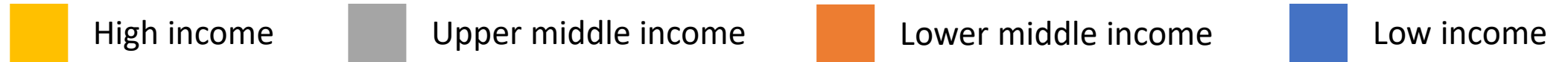
HISTORICAL RESPONSIBILITY: Cumulative emissions per capita

Grouping with respect to the income level



The comparison between historical and future emissions per capita allows us to visualize to which extent current NDCs address historical per capita liability.

Grouping with respect to the income level



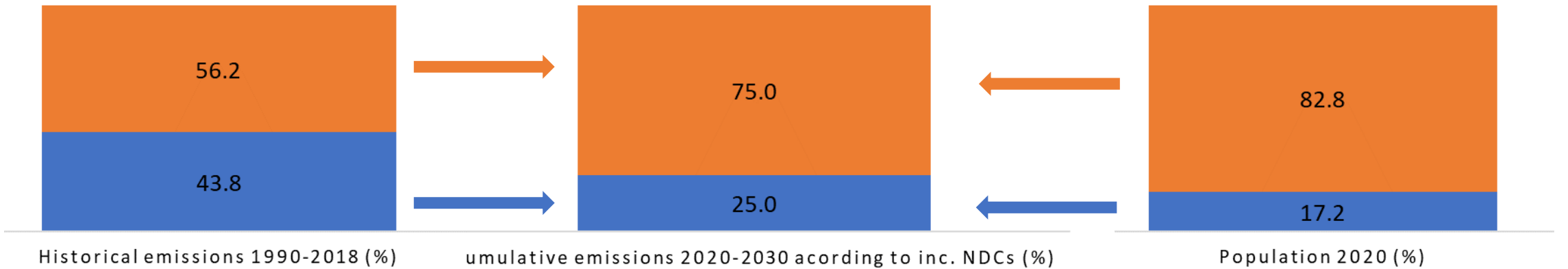
Annex I vs Non-Annex I groups



Percentual distribution of the 1990 - 2018 historical emissions

Percentual distribution of the 2020-2030 cumulative emissions according to unconditional NDCs

Share in the 2020 global population



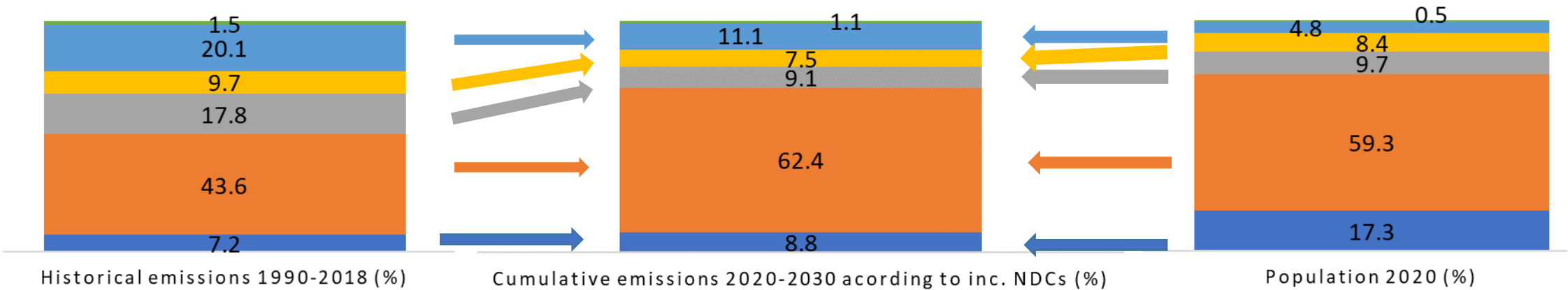
Grouping with respect to the continent



Percentual distribution of the 1990 - 2018 historical emissions

Percentual distribution of the 2020-2030 cumulative emissions according to unconditional NDCs

Share in the 2020 global population



Final remarks

- The share of the carbon space used by the most developed countries decreases. But **there is not compensation for the poorest countries** in accordance with their development needs.
- The **low share of future cumulative emissions of poorer countries could seriously affect their development**, considering the lack of some basic infrastructures and also the adaptation challenges that these countries have to face.

Final remarks

- In order to meet the Paris Agreement mitigation objective, the current NDCs should be revised by **increasing their level of ambition**. This revision should also be done **in the light of equity**.
- **The poorest countries could increase the carbon space they use to meet their development needs** in line with their share of the global population.

Final remarks

- In a hypothetical call for revision of the current NDCs, the total amount of the cumulative CO₂ emissions that the NDCs will imply **must be reduced about 45 %**.
- According to **equity, developed** countries must reduce the share of the carbon space they are taking **by more than 45 %** whilst developing countries could increase it.
- A sufficient share of the remaining global carbon budget must remain at disposal of developing countries to guarantee their **right to development**.

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