



# Nationally Determined Contributions: Areas to be addressed through national laws and policies

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Niklas Hagelberg  
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# 405.5 parts per million

- 3 million years ago
- 2-3 Celsius warmer
- 10-20 meters higher



# Global emissions up again after stabilization

2014 - 2016: emissions relatively stable

2017: clearly up, to a record 53.5 GtCO<sub>2</sub>e

Reasons: higher GDP and slower decline in energy intensity

## Global emissions show no signs of peaking

Already peaked: USA, EU, Russia (but going up again)

By 2030: 57 countries have peaked (60% global emissions)

G20: Argentina, India, Indonesia, Saudi Arabia, South Africa and Turkey no sign of peaking



Energy and Environment

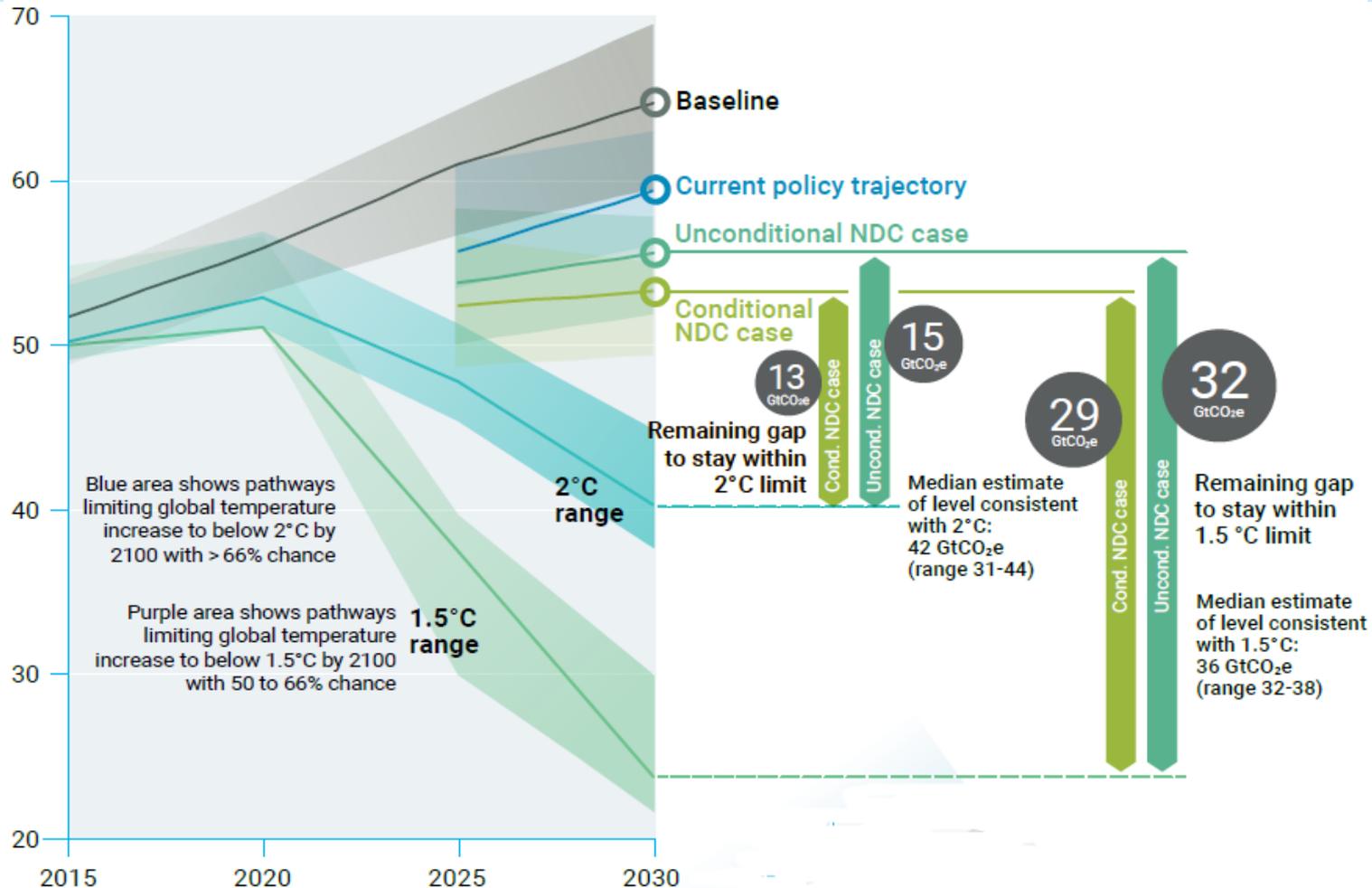
### Countries vowed to cut carbon emissions. They aren't even close to their goals, U.N. report finds

A new 'emissions gap' report says we're even further from where we need to be than we thought.

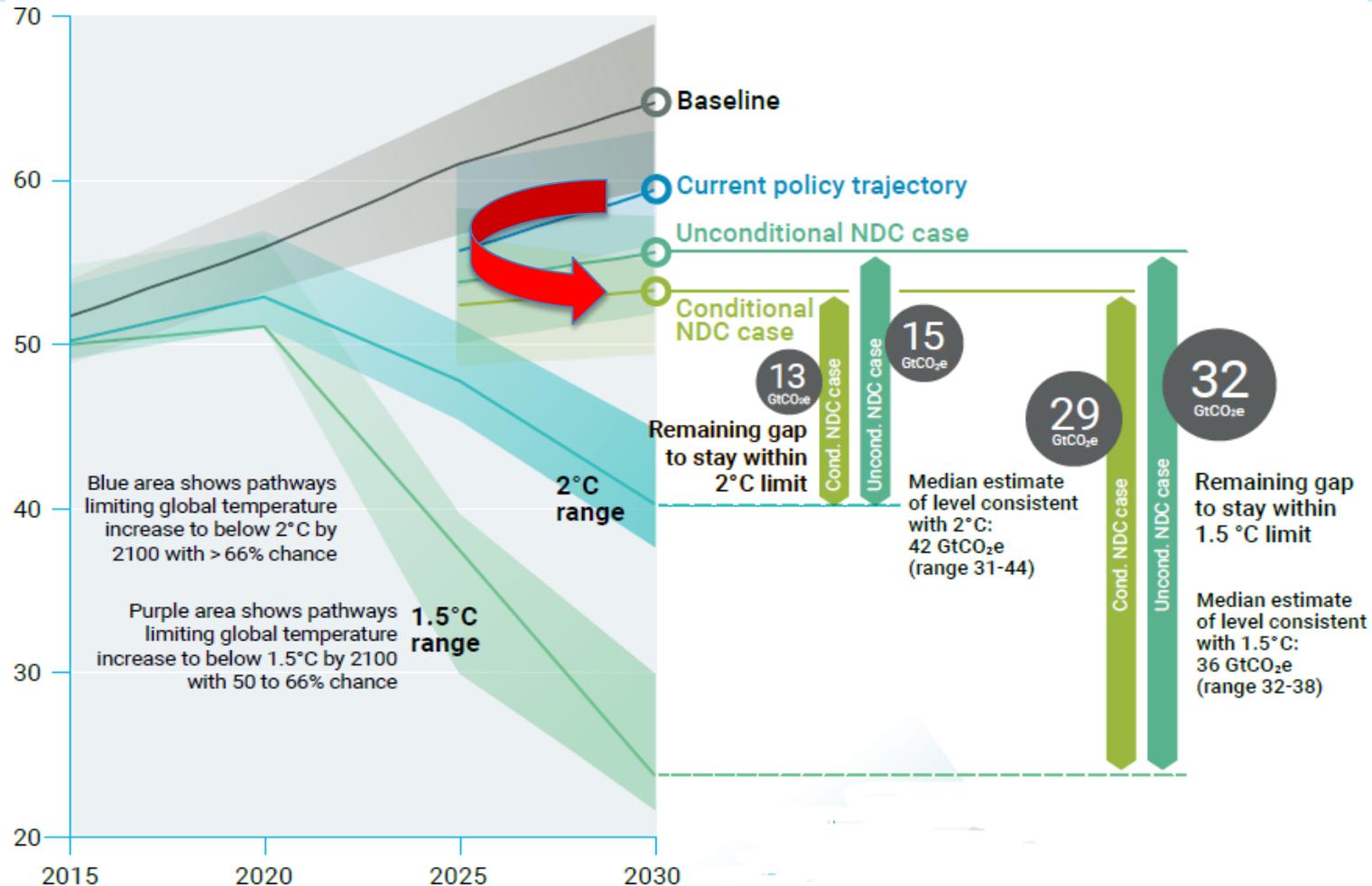


### Le monde s'éloigne de son objectif de ne pas dépasser 2°C de réchauffement climatique

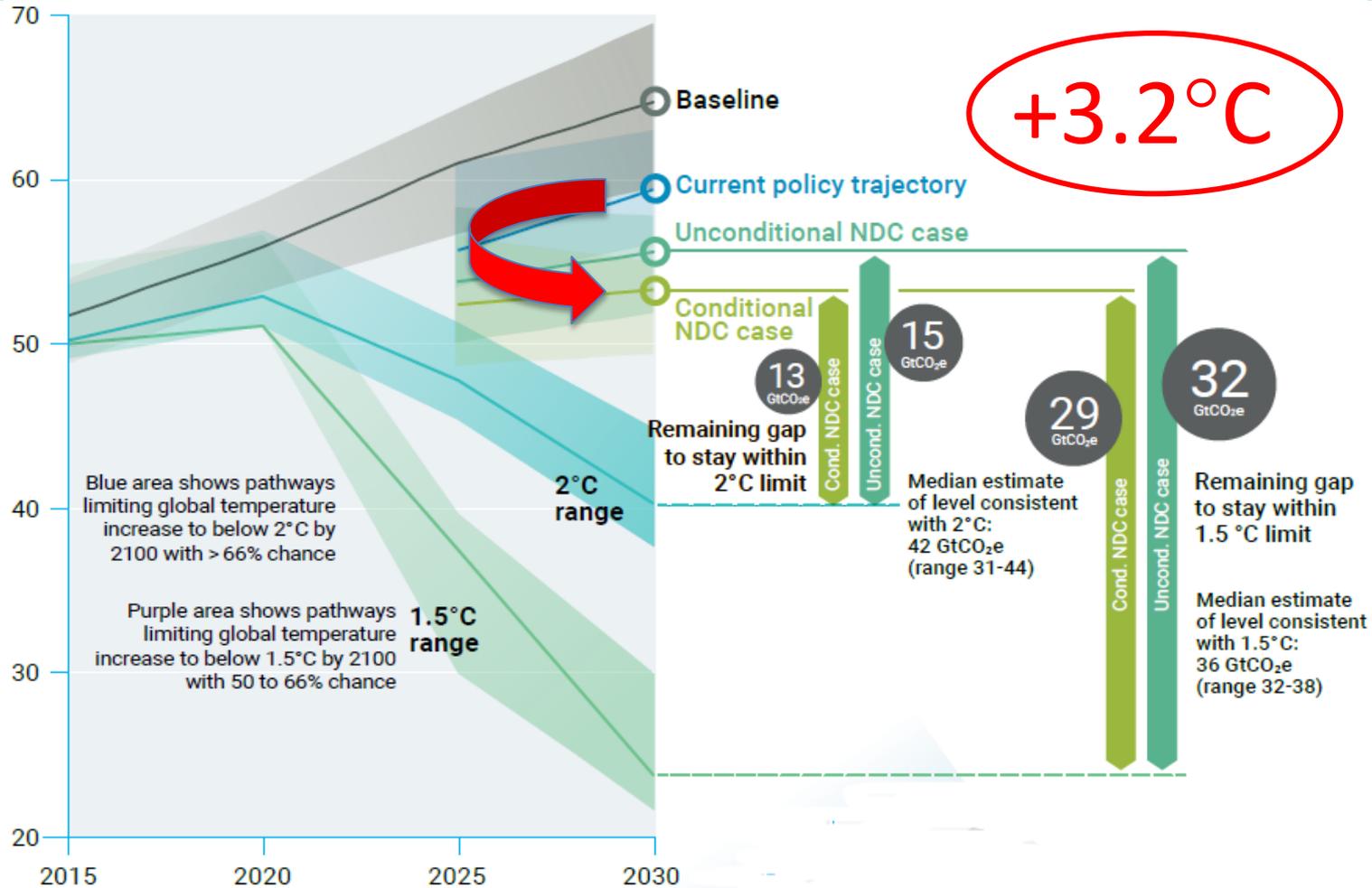
# The 2018 emissions gap



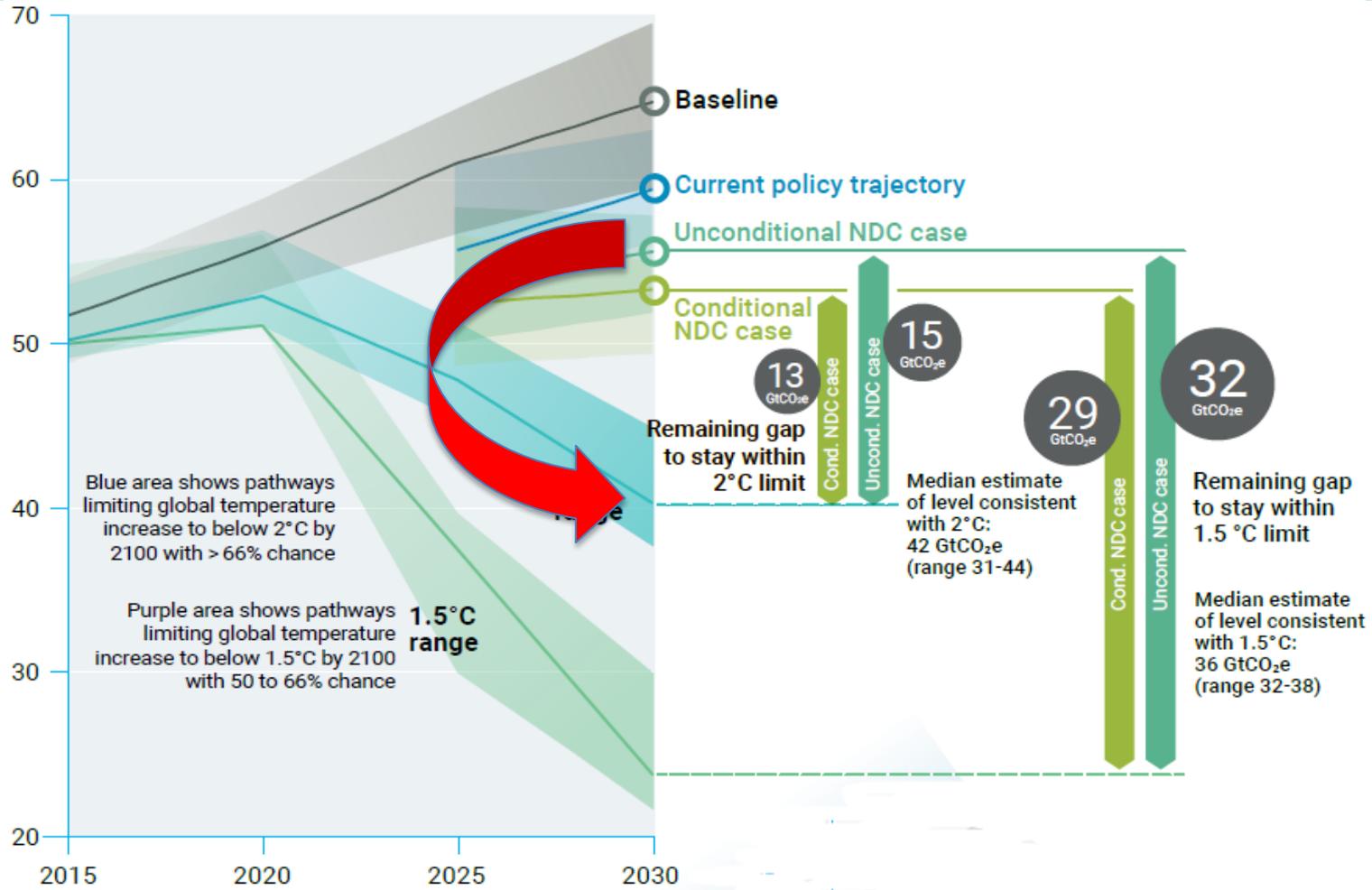
# Effect of climate plans insufficient



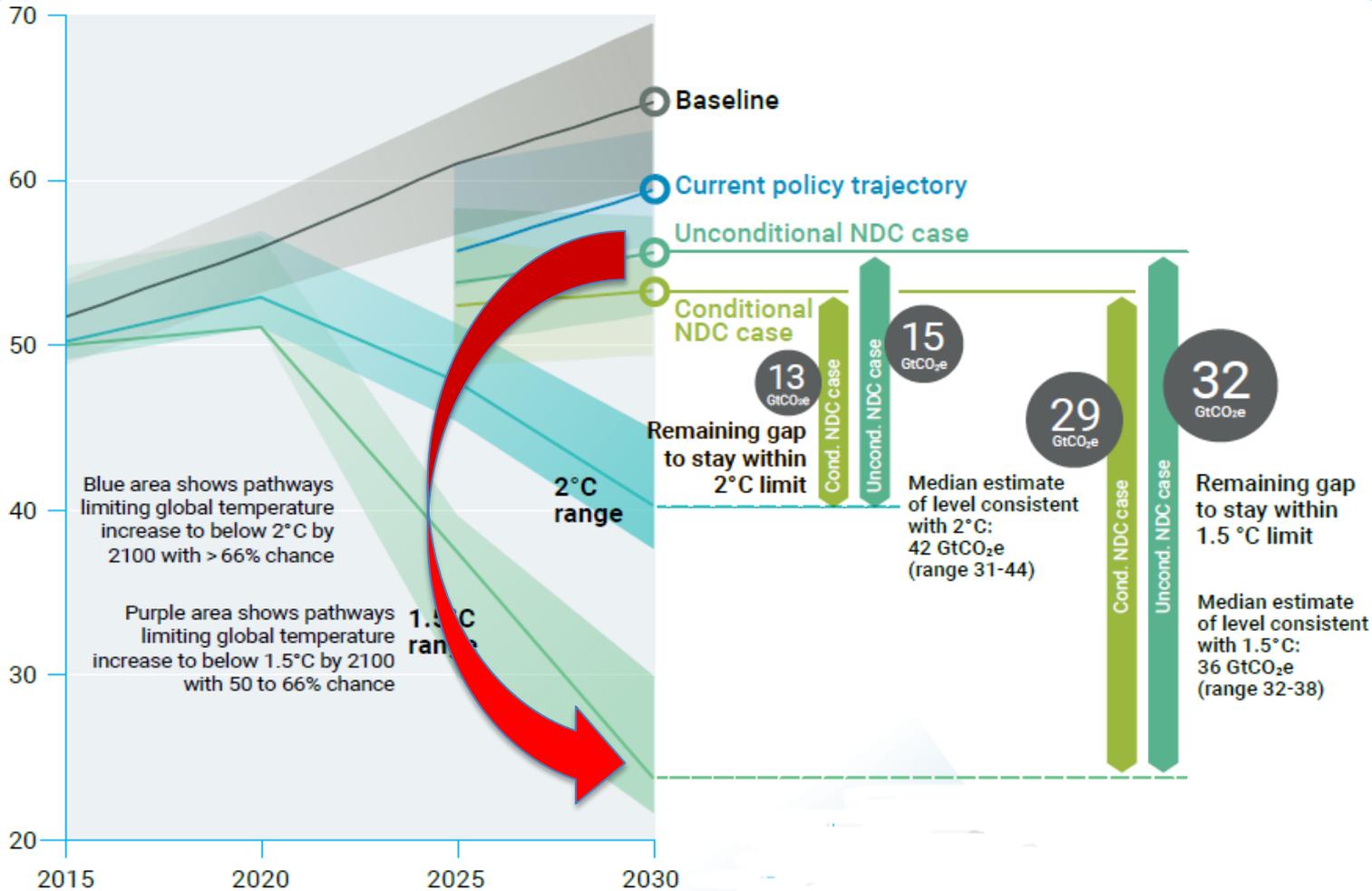
# Effect of climate plans insufficient



# 3X more ambition needed to fill the 2°C gap



# ...and 5X more to fill the 1.5°C gap



- Poorly equipped to deal with climate change
  - Health sector almost no capacity
  - Disease demonstrates higher mortality rate
- Economic losses from weather and climate-related disasters
  - 2017 costliest year on record, USD\$330 billion (of which US\$136 billion was insured losses),
  - Sweden forests fires
- Annual cost of adaptation US\$70-300 billion

- USD410/22 billion of climate finance
  - Most from public sources
    - 11 billion to water/waste water
    - 4 billion to natural resource management
  - 79% of 2015-2016 climate finance stayed within the country of origin



# Calls to step-up

- Secretary-General
- Heads of States
- Youth
  - Nationally Determined Contributions
  - Long-term strategies (2050)
  - Implementation



# Strengthening climate plans: elements for laws and policies

- Quantification of targets
  - clear signal about measurability, intention to measure
- Definitions of terms, duties, obligations and rights
- Effective governance system
- Nudge approaches
  - Street marking, placement of healthy food
  - Default carbon offsetting of air travel instead of an opt-in option
  - Default vegetarian food on planes



# Strengthening climate plans: fiscal policy

- Fiscal policies key opportunity for influencing economy, reducing future emissions and ensuring just transition
- 15% of global emissions covered by 51 carbon pricing initiatives, 20% if China joins.
- Carbon price of US\$70/tCO<sub>2</sub> leads to 10-40% emission reduction
- Consider a broad range of issues when introducing fiscal policy: equity, social acceptance, job creation, ....
  - Carbon fee & dividend



# Strengthening climate plans: win-win areas for laws and policies

- Short-lived Climate Pollutants
  - Air pollution & 0.5 degrees
- Innovation
  - Government must take high, early-stage risk
    - Mission-oriented innovation with concrete targets
    - Whole economy
    - Policy: bottom-up, participatory, long-term design
    - Help de-risk private investment
- Incredible development of solar panel deployment shows:  
public innovation policies crucial



# Solutions readily available

- Emission Gap Report
- Adaptation Gap Report
- Green-to-Scale
- Drawdown



# And its happening.....

- 10.3 million jobs in renewables
- 6th year with 2x more USD invested in renewable power capacity compared to fossil fuel
- Investments in storage companies
- 250 million electric scooters



# Thank you!

## Climate Change Coordinator

**Mr. Niklas Hagelberg**

UN Environment

Nairobi

Office Tel: +254 – 2076 24840

[niklas.hagelberg@un.org](mailto:niklas.hagelberg@un.org)

