
The Emissions Gap Report 2015

What contributions do the INDCs make towards the 2°C target?
How can the 2030 emissions gap be bridged ?

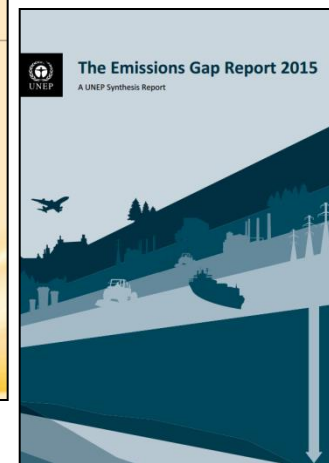
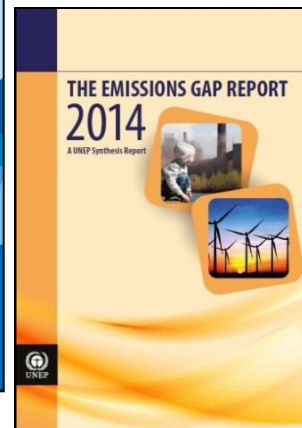
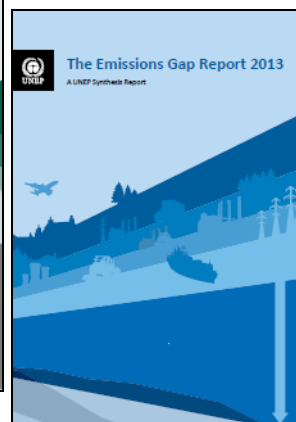
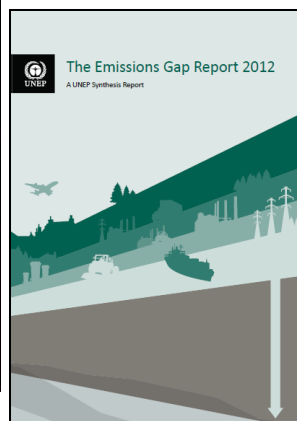
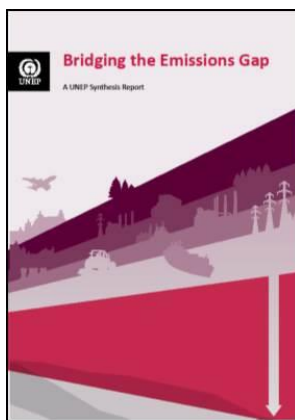
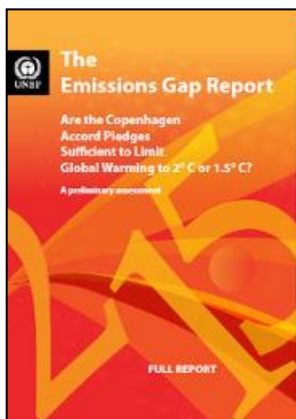
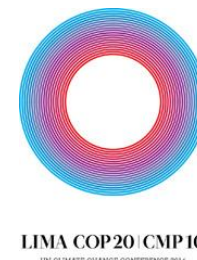
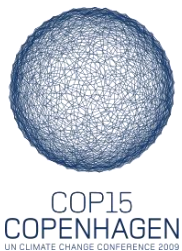
Geneva ♦ 6 November, 2015



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2015 GAP Report – Main Questions

What are we aiming for?

- Keeping temperature increase below 2°C/1.5°C by 2100

What is the pre-2020 contribution?

- Cancun pledges make a contribution, but enhanced early action is important

What do INDCs contribute?

- Emission levels resulting from submitted INDCs are 4 to 6 GtCO₂e/yr lower than the current policy trajectory in 2030, but the remaining Gap is in the order of 12 to 14 GtCO₂e/yr

Will this be sufficient to stay below 2°C?

- Without enhanced ambition the likely global average temperature increase will be in the range of <3 - 3.5°C by the end of the century

How can the 2030 Gap be bridged?

- Enhanced energy efficiency with a particular emphasis on industry, buildings and transport
- Expanded use of renewable energy technologies
- International Cooperative Initiatives at city and regional levels already deliver results and can be rapidly accelerated
- Forest mitigation actions are being undertaken by most countries, but there is significant scope for expansion, with REDD+ offering a special opportunity for developing countries

Approach to INDC assessment

- Assessment of literature on INDCs from global & national studies
 - Official estimates (documents submitted by countries to the UNFCCC)
 - Estimates from many country-specific studies (WRI, ERI, NCSC, etc.)
 - Eight global studies:
 1. Climate Action Tracker (CAT) (www.climateactiontracker.org)
 2. PBL Netherlands Environmental Assessment Agency (www.pbl.nl/indc)
 3. IEA WEO (adjusted) (CO₂ from energy, augmented with USEPA, NatComs, IIASA)
 4. London School of Economics and Political Science (LSE), UK
 5. University of Melbourne
 6. NIES, Japan
 7. Climate Interactive, US
 8. Danish Energy Agency

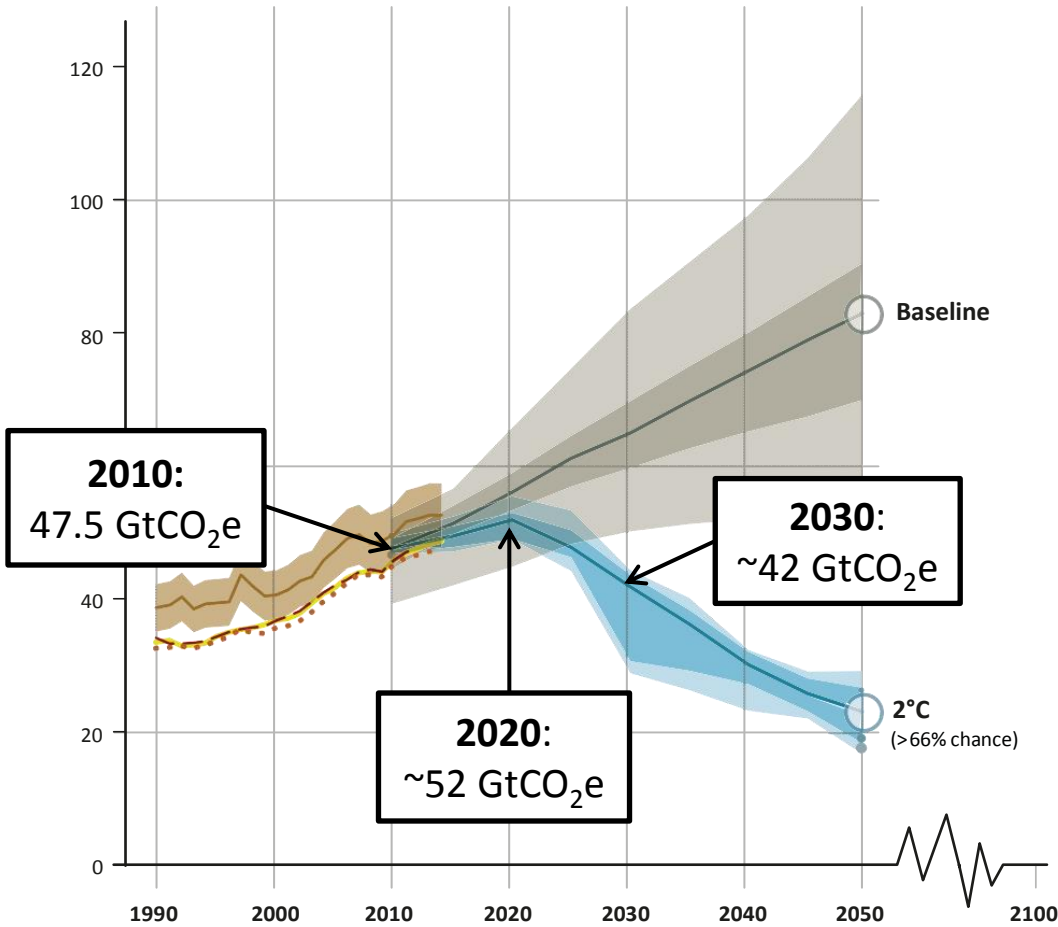


What are we aiming for?

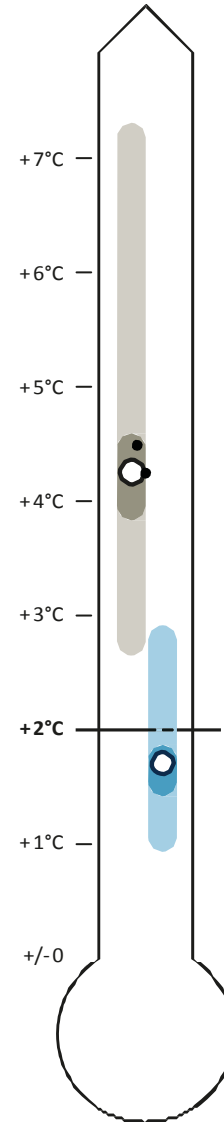
Staying within the 2°C target



GHG emissions
(GtCO₂e/yr)



Estimated global warming by 2100
(°C rel. 1850-1900)



IPCC AR5 scenarios

- Baseline**
median (line),
20-80% (darker)
min. - max. (lighter)
- 2°C limit (starting in 2020)**
median (line),
20-80% (darker)
min. - max. (lighter)

Importance of early action

Cancun pledges and beyond

- Progress on Cancun pledges achieved but not sufficient in all countries
- Full implementation and moving beyond pledges will
 - Make achievement of long-term goal easier
 - limit technology lock-in
 - reduce overall costs
 - reduce long term dependence on unproven technologies such as negative emissions

Challenges for INDC assessment



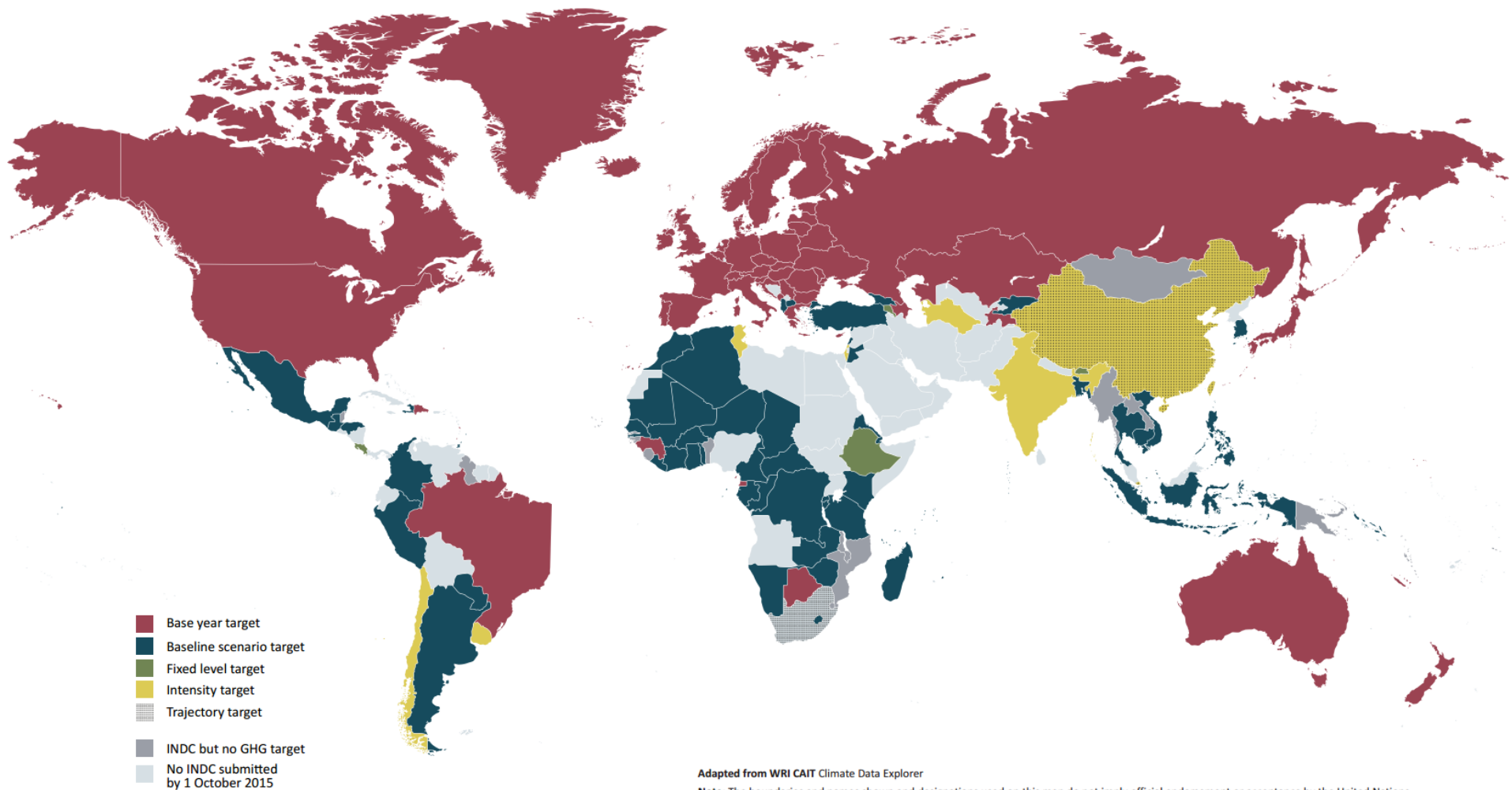
Wide variety of targets used :

- Economy-wide absolute reduction from historical base year emissions
- Emissions reduction relative to a baseline projection for the emissions associated with energy consumption
- Trajectory target for specific sectors or gases
- Specifying a peaking year
- Emissions intensity of GDP
- A fixed level target

Conditional & Unconditional

- 119 INDCs assessed
- 146 Countries included
- Representing 85 to 88% of global emissions in 2012
- 91 Countries have indicated need for financial support
- 71 Quantifying requirements in monetary term

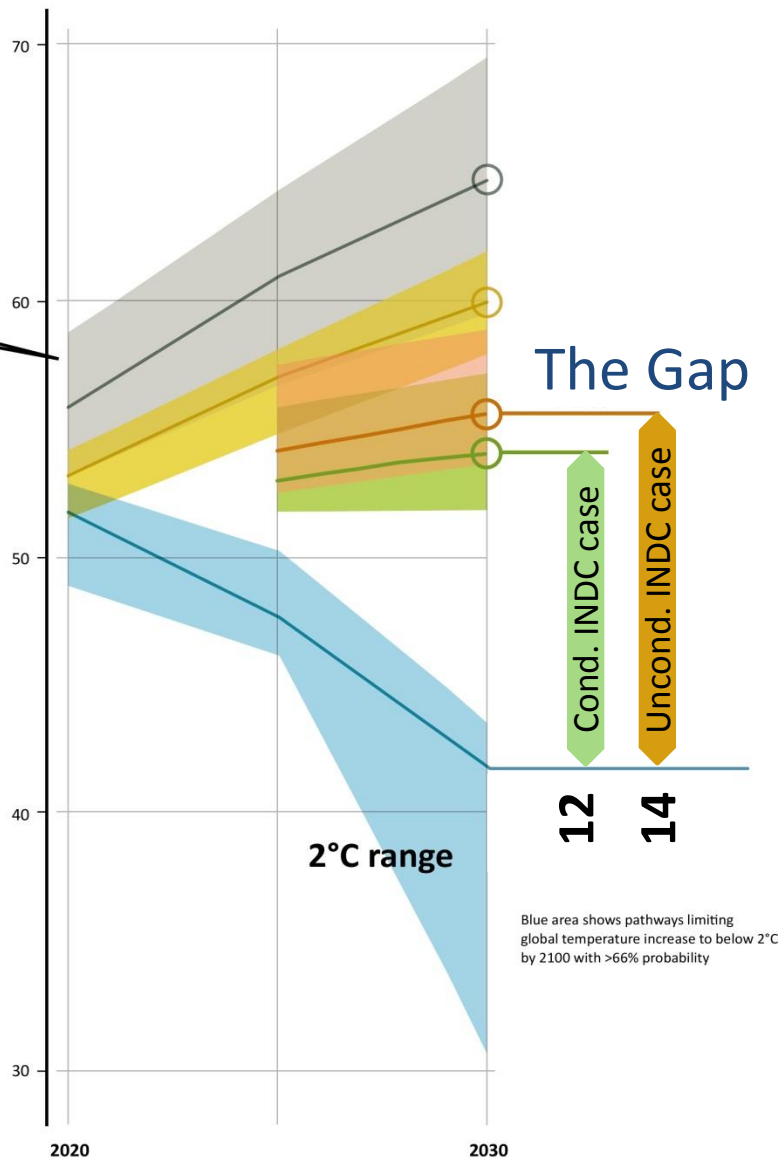
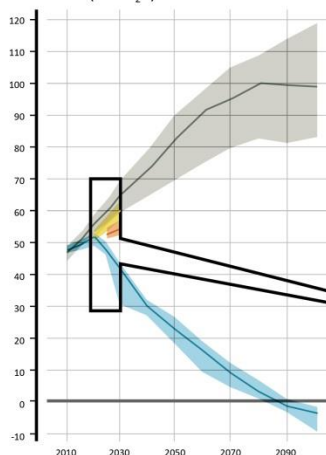
INDC submissions by type of mitigation target by 1st October 2015



INDC contributions and the emissions gap



Annual Global Total Greenhouse Gas Emissions (GtCO₂e)



Unconditional INDC case
Gap= 14 GtCO₂e

Conditional INDC case
Gap= 12 GtCO₂e

The INDCs present a real increase in the ambition level compared to a projection of current policies.

The emissions gap in both 2025 and 2030 will be very significant and ambitions will need to be enhanced urgently.

What will be the contribution of INDCs to the temperature target?

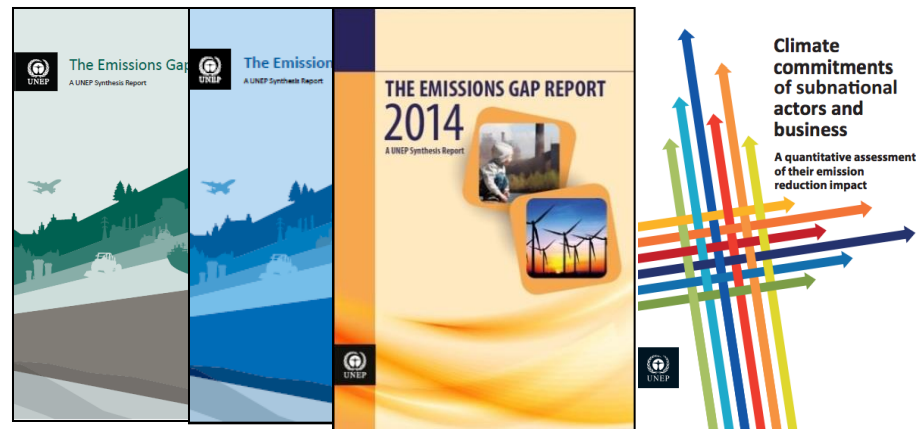
- Full implementation of unconditional INDCs results in emission level estimates in 2030 that are most consistent with scenarios that limit global average temperature increase to below 3.5 °C (range: 3 - 4 °C) by 2100 with a greater than 66 % chance
- Full implementation of conditional INDCs results in emission level estimates most consistent with scenarios that limit temperature increase to <3-3.5 °C by 2100
- INDC estimates have uncertainty ranges associated with them

INDC process as a foundation for closing the gap

- Unprecedented level of engagement by the Parties in the INDC process resulting in government endorsed plans
- Social and political INDC processes transcending the aggregate effect of emission reductions
- New climate policies and actions being galvanized
- Building links between development and climate and the SDGs enhancing the transition towards low-carbon economies

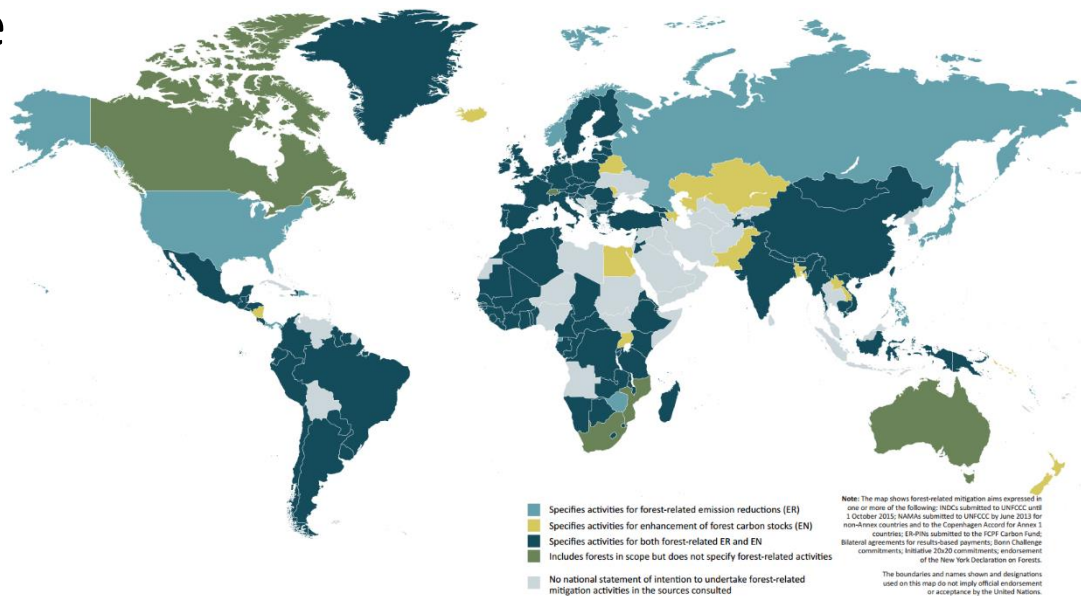
Further actions and initiatives for closing the gap

- Enhanced energy efficiency with a particular emphasis on industry, buildings and transport
- Expanded use of renewable energy technologies
- International Cooperative Initiatives such as the C40 Cities Climate Leadership Group, the Compact of Mayors, and the Cement Sustainability Initiative. Emission reductions from 0.75 to 2 GtCO₂e in 2020



Forest-related actions for closing the gap

- REDD+: theoretical potential up to 9 GtCO₂/yr in Africa, Asia and the Pacific and Latin America and the Caribbean combined, but likely to be constrained by economic and land use factors
- Co-benefits of REDD+: restoration of degraded forest landscapes, improved food production and enhanced climate resilience



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Thank you

Geneva ♦ 6 November, 2015



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