



# Beyond 40%

Assessing efforts to be Europe's climate leaders – Brussels, 26/09/2019

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Roundtable on  
Climate Change and  
Sustainable Transition

## Project background

- EU NDC commitment is a -40% domestic reduction target by 2030 (compared with 1990)
- However, there is a strong push to tighten that target, from:
  - Member States
  - Civil society and business
  - President-elect of the European Commission
  - Scientific consensus with regards to urgency
    - IPCC Special Reports (especially 1,5°C Report)

# Project background

- Momentum towards carbon-neutrality by 2050 as a target
  - Implications for 2030 target
- Actors in the EU are working towards raising climate ambition:
  - Member States
  - Regions
  - Cities
  - Civil society
  - Business

## Project background

- Commitments by non-state and subnational actors contribute to:
  - Help Member States reach their target
  - Provide support for more ambitious targets
  - Create space for experimentation and knowledge sharing
- However, we will focus on climate mitigation impacts

**Main question: how far are we actually going ‘beyond 40%’?**

## Project background

- Project seeks to:
  - Develop a methodology on mapping, assessing, quantifying and aggregating commitments
  - Identify best practices and no-regret policies
- Project does not seek to:
  - Identify, assess and aggregate all commitments made by all actors

**Focus on methodology development**

# Brainstorm event

- Purpose of this meeting:
  - Discuss our draft methodology
  - Collect input on the methodology from a variety of experts and stakeholders
  - Identify best practices and no regrets options in terms of (sub-) national climate commitments

# Methodology

1. How do we identify and map commitments?
2. How do we assess commitments
  - Including assessment of additionality
3. How do we aggregate commitments?
4. Identification of best practices and no-regrets options

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## How do we identify and map commitments?

- Commitments are taken at various levels
- Mapping needs to happen at those various levels as well
- For each level, we set out a small list of important sources
  - Happy to hear any we might have missed!

## Mapping of commitments: Member States

- Only level where ERCST may research full population
- National Energy and Climate Plans (NECPs) as a source of additional climate commitments
  - Issue: Some of the draft NECPs are vague at best with respect to planned climate actions and level of ambition

## Mapping of commitments: Regions and cities

- Sources of commitments include:
  - Committee of the Regions
  - Global Covenant of Mayors and C40 cities
  - ICLEI
  - Carbonn Climate Registry
  - Under 2 Coalition
  - Eurocities
- Issue: vast amount of commitments undertaken by subnational actors
  - Global Covenant of Mayors alone nearly 8000 commitments in the EU

## Mapping of commitments: Non-state actors

- Business and civil society
- Sources of commitments include:
  - CDP
  - CAN Europe
  - European Environmental Bureau
  - Business and sectoral associations
- Issue: vast amount of commitments and no central ‘reporting point’ – especially for civil society

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# Assessing commitments – overview

- Assessing commitments along two axes:
  1. How detailed and credible is the commitment? Do we think it will be reached?
    - Use typology and short/long term credibility to assess this
  2. What level of confidence do we have in additionality of the commitment?
    - ‘level of credibility of additionality’
- Commitments that are credible and additional should be counted as going ‘beyond 40%’

## Assessing commitments – typology

- Typology is necessary to define some of the key aspects of any climate mitigation commitment
- Potential list of ‘key aspects’ is very long
  - We propose limited list of 7 key aspects

## Assessing commitments – typology (2)

### 1. Actor and geographic coverage

- Country, company, city etc

### 2. Target

- Type: Goal, milestones, aspiration, etc
- Target year
- GHG versus non-GHG target (energy efficiency, RE)

### 3. Baselines

- Baseline year and inventory
- Use of counterfactuals and scenarios

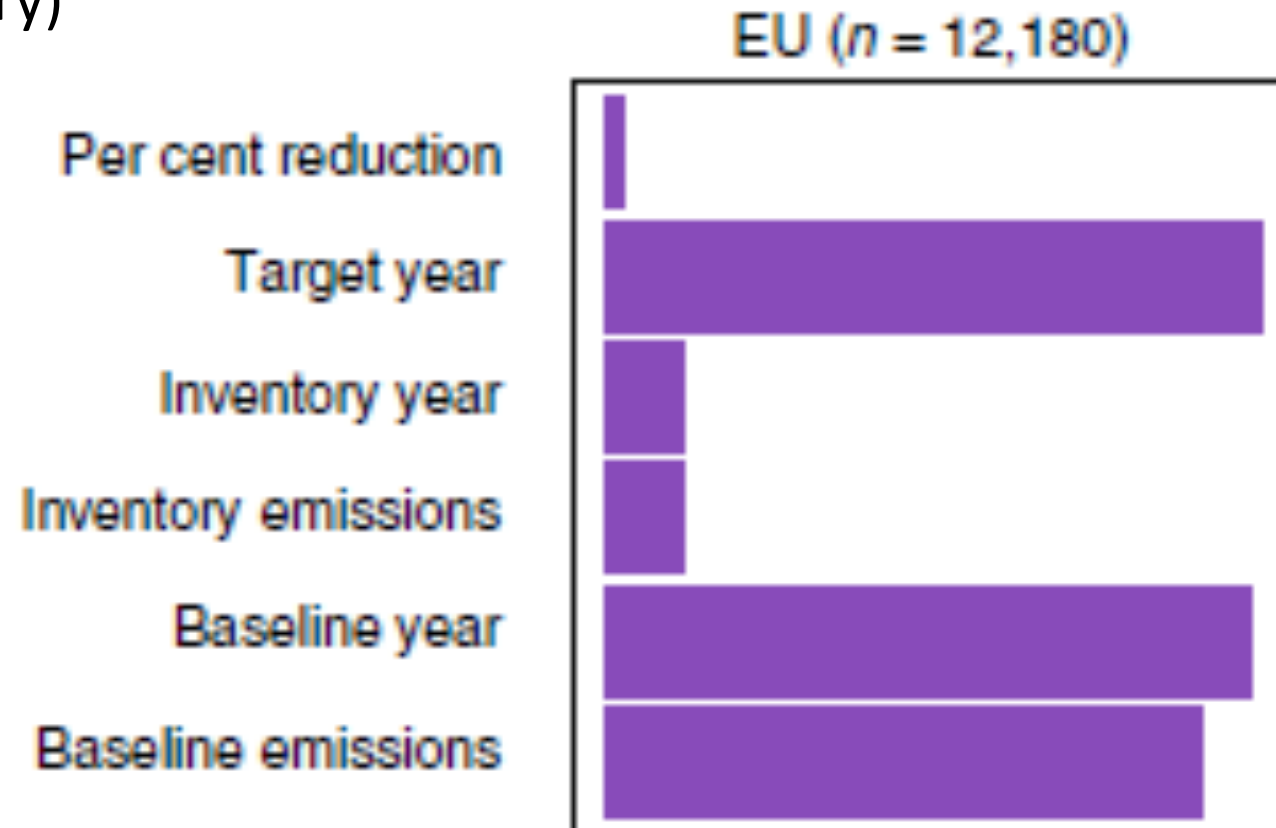


## Assessing commitments – typology (3)

4. Internal versus external action
  - Offsetting vs emission reductions
5. Type of commitment
  - Declaration of intent, pledge, legally binding commitment
6. Resources made available
  - Financial/human resources in budgets
  - Governance structures put in place
7. Scope of emissions covered by commitment
  - Scope 1, 2 and/or 3

# Assessing commitments – typology (4)

- Important issue: lack of details and data on commitments made
  - Paper by Hsu et al (2019) made an overview of key data missing from reporting by under selected initiatives (CDP, Global Covenant of Mayors, Under 2 Coalition, carbonn Climate registry)



# Assessing commitments – credibility

- Credibility of a commitment is a core issue
  - Problem for all actors, but less for Member States
  - No enforcement mechanism for voluntary climate commitments
  
- Two different types of credibility:
  - short term
  - long term

# Assessing commitments – short term credibility

- Type of commitment
  - Declaration of intent, pledge, legally binding commitment
- Concretization of commitment
  - How has it been translated into concrete measures?
  - Has it been broken down into a workable ‘action plan’?
- Institutionalization
  - Have necessary governance mechanisms been implemented?

## Assessing commitments – short term credibility (2)

- Monitoring and compliance
  - Have indicators been defined?
  - Are monitoring mechanisms and compliance checks included?
- Technical viability
  - Have they done an in-depth analysis on technological feasibility?
  - Does the technology to reach the commitment ready?
  - Is the commitment technically viable in the proposed time frame?

# Assessing commitments – long term credibility

- Political sustainability
  - Is there broad support for the continuation of the measures?
  - Is it likely to be crowded out if budgets shrink or side lined by other issues in local politics, board rooms, etc....
  
- Economic sustainability
  - Is there a potential for economic advantages?
    - First mover advantages?
  - Could carbon leakage concerns undermine the commitment?

# Assessing commitments – additionality

- Commitments need to add ambition to current EU NDC target
  - NDC economy wide target has been split up in:
    - EU level EU ETS target (ETS sectors)
    - MS level ESR targets (ESR sectors)
  - Important implications for additionality under both
- NDC target is domestic: any action in third countries is additional, but does not count towards NDC target
  - Climate finance, mitigation projects, capacity building etc.

# Assessing commitments – additionality in ETS

- Power, industry and aviation
- Cap and trade: waterbed effects!
- Automatic cancellation exists through MSR
  - Cancellation to start in 2023
  - MSR intake is partial and slow
    - Especially considering coal phase outs in various Member States

***Any commitment within ETS sectors can only be additional if coupled with cancellation of EUAs***



# Assessing commitments – additionality in ESR

- Transport, buildings, agriculture, industry, waste
- MS level targets – waterbed effects within each Member State
  - Any action by sub-national and non-state actors in these sectors counts towards MS level compliance
  - Could be an issue if action crowds out MS action
    - Non-intentionally, or intentionally
- Trading mechanism between Member States
  - Potential waterbed effect

***Member States play a crucial role in how they incentivize and interact with non-state and subnational action***

# Assessing commitments – additionality in CDM

- Defined in the Kyoto Protocol (Art. 6) as:
  - “Any such project provides a reduction in emissions ... that is additional to any that would otherwise occur”
- Has been assessed both for projects and for technologies
- Considered problematic by some actors
  - Some research has pointed towards low likelihood of additionality of projects

# Assessing commitments – additionality under Art. 6.4

- Paris Agreement, COP (Decision 1/CP.21, para 37):
  - “*Recommends* that the ... [CMA]... adopt rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Agreement on the basis of:
    - d) Reductions in emissions that are additional to any that would otherwise occur;”
- Concrete mechanism for ensuring additionality under Art. 6.4 is still under negotiation
  - Probable: a Supervisory Board will define ‘tests’ for additionality

# Assessing commitments – additionality

- We would approach it as: ‘level of confidence in the additionality of a commitment’
- Subjective approach, based on information from assessment of commitments
- Low to high confidence
  - High confidence, for example MS climate law with higher targets than ESR
  - Low confidence, for example MS phases out coal without any cancellation mechanism for EUAs

## Assessing commitments – additionality (2)

- Criteria to be used to determine ‘level of confidence in additionality’
  - Ambition of the commitment
  - Waterbed effects
  - Supply chain overlap
  - Geographic overlap

## Additionality – Ambition

- Ambition need to be compared with current NDC target
- 'beyond 40%' if commitment goes beyond emission target
- This means going beyond highest level of disaggregation of the NDC target
  - EU ETS sectors: EU wide target
    - **This implies one target for all ETS sectors** (power/industry: -43% compared to 2005)
  - ESR sectors: MS target
    - **This implies a MS target covering all ESR sectors in that MS** (EU wide -30% compared to 2005)

## Additionality – Ambition

- How do we assess ambition of targets aiming beyond 2030
  - Assume linear trend and compare what that trend estimates for 2030
- Since IPCC 1,5°C Report: surge in carbon neutrality pledges
  - Should always be considered more ambitious as there is currently no such EU goal

## Additionality – Waterbed effects

- Emission reductions by one actor lead to weakened climate constraints for others
- Potential for perverse incentives
  - Coal phase outs could significantly impact price discovery in EU ETS reducing incentives for decarbonisation for other EU installations
- Examples:
  - Steel industry promises coal phase out, while aviation sector expands emissions under the EU ETS
  - Dairy sector in commits to EU reduction in methane emissions, country A therefore implements less action in transportation to reach ESR target



## Additionality – Supply chain overlap

- Same emissions are tackled from a supply – demand perspective
- Both commitments could be associated with the same reductions
- Examples:
  - Construction companies pledge to use more climate friendly building materials while cement producers commit to reducing GHG-component of cement
  - Car manufacturers and cities phasing out fossil fuelled cars at the same time

## Additionality – Geographic overlap

- Actors in the same geographic area taking actions that focus on the same emissions
- Both commitments could be associated with the same reductions
- Examples:
  - MS promises to reduce GHG from LULUCF sector, while region promotes reforestation
  - City commits to reducing transport emissions, at the same time local taxi companies pledge to move to electric vehicles

***Nearly all commitments from non-state and subnational actors overlap with either EU wide ETS target, or MS level ESR target***

## Assessing commitments – additionality

- Which extra criteria can be used to assess ‘level of confidence in additionality’?

# Assessing commitments – overview

- Assessing commitments along two axes:
  1. How detailed and credible is the commitment? Do we think it will be reached?
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- Commitments that are credible and additional should be counted as going ‘beyond 40%’

# Assessing commitments – overview (2)

## Example of how criteria could be used to ‘score’ likelihood of reaching commitments

Criteria	Low	Medium	High
<b>Target</b>	Undefined or vague aspirational goal	Clear target, but no target path defined	Clearly defined goals and milestones, with a target path and year
<b>Baselines</b>	Undefined	Baseline and inventory used, but lack of clarity on methodologies and scenarios	Clear baselines and scenarios used
<b>Mitigation perspective</b>	Offsetting with unclear methodologies	Offsetting with robust methodologies and clear governance	Emission reductions
<b>Type of commitment</b>	Declaration of intent or aspiration	Pledge	Legally binding commitment
<b>Resources available</b>	No resources mobilized up front	Governance structures ready, but no long term financial support available	Long term vision enacted with regards to human and financial resources necessary. Resources earmarked.
<b>Scope of commitment</b>		Only scope 1 covered	Scope 1 and 2 and/or 3 emissions covered (direct and indirect emissions)
<b>Short term credibility</b>	Pledge without indication on how it will be made actionable, nor monitoring tools	Pledge with concrete measures, however no institutional arrangements in place. No monitoring tools. Technology in R&D phase.	Pledge implemented through concrete measures and action plan. Clear institutional framework put in place. Technology mature.
<b>Long term credibility</b>	Lack of public and political support for measures	Lack of political support, yet high public support. Clear carbon leakage issues undermining long term credibility.	High political and public support, strong support from employees, shareholders etc

# Assessing commitments – overview (2)

## Example of assessing levels of confidence in additionality

Criteria	Low confidence	Medium confidence	High confidence
<b>Ambition</b>	Commitment is below relevant sectoral target	Commitment is close to relevant sectoral target	Commitment is significantly higher than the relevant sectoral target
<b>Potential for waterbed effects</b>	MS is behind on ESR targets, and any action by non-state and subnational actors in those sectors will lead to less AEAs needing to be bought. Coal phase out not linked to any cancellation policy		MS commits to voluntary cancellation of EUAs to limit waterbed effects of industry action in ETS sectors in the country, or sets internal-ESR targets higher than those in ESR decision while declaring not to sell AEAs
<b>Geographic overlap</b>	City commits to reducing transport emissions, at the same time taxi companies pledge to move to electric vehicles		Action in international or EU maritime transportation sector. Action for cruise sector
<b>Supply chain overlap</b>	Car manufacturers and cities phasing out diesel fuelled cars at the same time	Space for assessment on whether scope 1 emissions under commitment A are scope 2 and/or 3 under commitment B and/or C	Demand and supply actors coordinate climate action. Actions improving energy efficiency and investing in renewable energy

## Assessing commitments – overview (3)

- Combining both tables leads to a ‘score’ for each commitment
  - How credible and detailed it is
  - Level of confidence in additionality
    - Together: list of commitments that score combined
      - Low
      - Low-medium
      - Medium-high
      - High
  - Labour intensive and subjective process to assess every individual commitment for all these criteria

# Assessing commitments – overview (4)

## Example of assessing levels of confidence in additionality

Likelihood to be reached	Level of confidence in additionality	Overall 'score'
Low	Low	Low
	Medium	Low-medium
	High	
Medium	Low	Low-medium
	Medium	Medium-high
	High	Medium-high
High	Low	Low-medium
	Medium	Medium-high
	High	High

**Low and low-medium:**  
no additionality

**Medium-high:**  
partial additionality  
*(50% 75%?)*

**High:**  
high additionality



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# Aggregating commitments

- Move forward with those commitments that are score medium-high and high
- Quantify and aggregate the commitments
  - Potential list of commitments is in the '000s
- Important because:
  - For the climate the important numbers are how much CO<sub>2</sub>e is emitted, and by when
  - Aggregation of additional impacts would show to what level we can raise our NDC target without even adding ambition

## Aggregating commitments (2)

- Commitments need to be translated into a form that is comparable with current target
  - Target metric: CO<sub>2</sub>e
    - Expected metrics include GHG; EE (% or intensity); RE (% or capacity); wide variety of transport metrics (vehicles use, kilometres driven, types and ages of vehicles, % electric vehicles etc)
  - Target year: single year target by 2030
    - Target year could change coming year(s) – has significant repercussions for anyone implementing this type of exercise
    - Other target years or trends would need to be projected to 2030 using linear trends

## Aggregating commitments (3)

- Baselines: 1990 emissions
  - Project baseline used onto 1990, or compare it with emissions in the year that the projection was made
  - Use EU wide growth rate for emissions to project targets and baselines
- Transnational commitments:
  - EU target is economy wide, and transnational actors might make commitments across various jurisdictions
  - Commitments need to be allocated to MS if in ESR sectors
    - Could use index for economic activity per country – could be production, value added, employees, sales, etc

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# Best practices and no-regrets options

- Two aspects to this:
  - Best practices with regards to how to formulate commitments, assess and aggregate them
  - Best practices with regards to inspirational climate action that could be examples to others actors
- Our focus will be on the latter

## Best practices and no-regrets options (2)

- We aim to gather examples of climate action that are impactful, can be copied or are scalable
- Examples will cover:
  - All actors (MS, subnational, private sector, civil society)
  - Various types of commitments
  - Differences in governance systems and multilevel governance considerations
  - Different mitigation technologies
  - Methodological issues identified during the project

# Issues for discussion

- Which extra variables can be used to assess ‘additionality of commitments’?
- How can non-state and subnational entities raise ambition by addressing overlaps in targets with MS and EU level?
- How can MS and EU incentivize action by non-state and subnational actors?
- How can we best identify and spread awareness of best practices?
  
- Comparing ambition means one ETS target for all ETS sectors, and one ESR target for all ESR sectors in a country
  - However, there is a clear differentiation in mitigation *expectations* between sectors up to 2030
    - For example: should we use different targets for power and industry?
    - How do we assess expectations? Which ones ‘count’? EC Impact Assessments? Sectoral Roadmaps?