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The EU's NDC after the Talanoa Dialogue

Options for enhancing the EU's NDC for 2030

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Introduction: Current NDC

- A 'binding target of an at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990'.
 - Single-year reduction target
 - Economy-wide
 - All GHGs not controlled by the Montreal Protocol
 - No international component
- Short document (3 pages) without
 - Detailed description of how target will be reached
 - Analysis of intra-EU effort sharing



Introduction: recent developments

- EU NDC built on European Council Conclusions of 23/24
 October 2014, but EU legislation has changed since:
 - Agreements on Emission Trading Scheme (ETS) and Effort Sharing Regulation (ESR) for 2021-2030
 - Adoption of Clean Energy Package for All Europeans
 - Higher targets as foreseen in 2014
 - Other legislation
 - LULUCF Regulation
 - Energy Performance in Buildings Directive
- Upcoming EU LTCS
 - Will it include stocktaking on:
 - Impacts new legislation?
 - Impacts current Member State policies?
 - Impacts upcoming National Climate and Energy Plans





Introduction: why enhance ambition?

- Ratchet/ambition mechanism is a key element of the Paris Agreement
 - The EU has the <u>opportunity</u> to update and enhance its ambition up until 2020
 - EU was one of the main proponents of this mechanism
- Motivate other Parties to further enhance their ambition
- Changes in legislation
 - RE and EE: de facto lead to emission reductions 'slightly over 45% by 2030'
- Current EU efforts are insufficient to reach 2011 Roadmap targets
 - New LTCS is on the way
- The world is currently not doing enough
 - UNEP's GAP Report, IPCC's 1.5°C Special Report, etc.



Structure: 3 major approaches

- Change the domestic headline target of the EU NDC and adjust main climate legislation.
- 2. Increase the ambition of climate related policies without adjusting the headline target of the EU NDC
- 3. Use of international cooperative mechanisms in addition to the existing domestic headline target



3 major approaches and one imperative?

- The EU NDC can also be enhanced in terms of communicative quality
 - Article 4.16 of the Paris Agreement requires Parties (including regional economic integration organizations) to report on internal effort sharing agreements
 - This is currently missing from the EU NDC!
 - NDC could provide a more accurate and detailed picture of what the EU is doing and how



3 major approaches and one imperative? (2)

- The EU NDC can also be enhanced in terms of communicative quality
 - A transparent and clear NDC could support the Paris Agreement process more strongly by providing an example for other Parties
 - For example with respect to EU MRV tools and policy review cycles
 - Link 2030 with longer term objectives from EU LTCS
- Only adapting the EU NDC to upgrade it as a tool for communication is unlikely to perceived internationally and domestically as an enhancement of ambition
- Could this be a no-regret options to be combined with other options?



Structure: 3 major approaches

- 1. Change the domestic headline target of the EU NDC and adjust the main climate legislation.
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1. Change the domestic headline target and adjust the main climate legislation.

- Increase the target/scope of the domestic GHG reduction target of the EU
- The new target, and adjusted climate legislation, will need to be agreed upon by the European Council.
- Revisiting climate legislation will likely have to go through the full ordinary legislative procedure.
- Action by the EU as a whole (no 'fragmentation')
- Ties hands of EU Member State governments and EU institutions
 - In present and future



Main approach 1: change domestic headline target and adjust main climate legislation

Three main options for this approach

Option 1: Enhance the headline target and adjust EU climate legislation

Option 2: Change the single-year emissions reduction target to a carbon budget

Option 3: Increase the scope of the NDC



1.1 Enhance the headline target and adjust EU legislation

- Increase headline target and adjust EU climate legislation accordingly – EU ETS or ESR most likely candidates
- Examples from EU ETS and ESR include:
 - EU ETS:
 - Increase the linear reduction factor
 - Adjust the functioning of the MSR: greater uptake or cancel larger quantities of allowances
 - Implement a price floor
 - ESR
 - Increase Member States' ESR targets
 - Limit flexibilities



1.1 Enhance the headline target and adjust EU legislation

- Could also be done in beyond EU ETS and ESR policy
- Examples include
 - Secondary targets could be mandated for sectors covered by either ETS and/or ESR
 - Mandating emission reductions for a given sector, for example phasing out fossil fueled vehicles in the transport sector or coal plants in the power sector
 - RE and EE targets (already done in 2018)
 - LULUCF: replacing non-debit rule with targets for enlarging sinks and carbon stocks
 - Greening the Multiannual Financial Framework
 - Climate-related public procurement rules for EU investments

• ...



1.1 Issues

- Changing the existing climate legislation will likely have to go through the full ordinary legislative procedure
 - Are EU Member States willing to reopen the energy and climate framework?
- How much of the existing legislation do you revisit?
 - E.g. how do you review the ESR directive?
 - Entirely including criteria for effort sharing, MS targets, flexibility mechanisms
 - Only look at selected element(s) such as MS targets
 - Could focus on more political and less technical issues



1.1 Issues

- Possibility to review headline target now, review policies later
 - Use review calendar of relevant policies
 - However: First global stocktake set for 2023, and first ESR review set for 2024
- Changing climate legislation should not undermine the functioning of the policy
 - For example waterbed effects in the ETS
- Adapting target to current overachievement and new/changed policies (for example EE and RE)



1.2 Adopt a carbon budget

- The current NDC target is a single-year target
 - emissions trends are in theory flexible, and environmental consequences uncertain
- A carbon budget would provide clarity,
 - environmental, scientific and investment perspective
- It represents an increase in ambition as a limit is placed on cumulative EU GHG emissions
- Can be combined with point year target to strengthen predictability on emission trend



1.2 Issues

- The EU's two main climate policies already have budgetary aspects
 - Would the aggregation of those budgets be considered an increase in ambition?
- How is the budget defined and set?
 - Yearly targets? LRF?
- Selection of start and end years of the budget
 - Start in: 1990, most recent data available, 2021?
 - End in: 2030, 2050, 2100?
 - From scientific point of view: earliest start and latest end



1.2 Issues

- International response
 - Attract discussion on historic responsibilities and criticism, or
 - Provide momentum to spread this approach?
- Communication to stakeholders (including citizens)
 - Focus has always been on 'percentage' and what it means
 - Is it wise to throw that overboard for new approach?



1.3 Increase the scope of the NDC

- The scope of the EU NDC is economy-wide according to UNFCCC definitions – yet it does not include:
 - International maritime
 - International aviation
 - Embedded carbon in goods and services
- Emissions from these sources will need to be tackled/further tackled at some point
- Maritime and aviation under discussion at IMO and ICAO
 - EU could in theory add either or both sectors to its NDC to show leadership
- Expand scope by extending horizon NDC beyond 2030?



1.3 Issues

- Strong international concerns and repercussions to including these emissions in NDC and taking action
 - How would international trade partners and WTO receive an EU border carbon adjustment?
 - Inclusion of international transportation could impact efforts to do so in the UN bodies
 - Increase pressure for strong mechanisms on ICAO and IMO (e.g. 'stop the clock')



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- 1. Change the domestic headline target of the EU NDC and adjust the main climate legislation.
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2. Increase ambition without adjusting headline NDC target

- Ambition can also be increased without adjusting the headline NDC target
 - Headline target stays the same, but extra commitments are added to NDC and listed
- Allows for actions by whole EU, individual or groups of Member States to be included in NDC
- Also non-state actors
 - Cities, economic sectors, individual companies, civil society organisations etc.



2. Increase ambition without adjusting headline NDC target (2)

- Risk of fragmentation of policies AND commitments
 - What would the international impact be of an EU NDC that lists actions at other levels that the EU?
 - Message on EU ambition and cooperation?
 - Impact on cost effectiveness of EU climate action
 - Race to the top or to the bottom?
 - Impact on single market?
- Commitments need to be quantifiable and verifiable
- Legal aspects
 - Who is responsible for commitments below Member State level?
 - Are commitments from non-Parties acceptable?



Main approach 2: increase ambition without adjusting headline NDC target

Three main options for this approach

Option 4: Increasing the ambition of the ESR

Option 5: Increasing the ambition of the EU ETS

Option 6: Increased efforts in other areas



2.1 Increase the ambition of the ESR

- There are several alternatives to increase ambition in the ESR sectors:
 - Increase the overall ESR emission reduction target (see 1.1)
 - Unilateral overachievement of existing ESR targets or extra commitment beyond current target
 - By individual or by group of Member States
 - Cooperation between Member States on specific sector(s)
 - cross-border mechanisms for ESR sector: agriculture, transport etc...
 - Committing to limit the use of the available flexibility mechanisms in the ESR



2.1 Issues

- Danger of fragmentation of climate policies and efforts
- Perception of unilateral action or action by a coalition of Member States
 - Sufficiently large and transparent to provide a credible signal and useful addition to the EU NDC?
 - Domestic and international perception?
- If ESR is reviewed: full or limited review
 - Headline target, flexibility, criteria for effort sharing etc.



2.2 Increase the ambition of the EU ETS

- There are several alternatives to increase ambition in the ETS sectors:
 - Revisiting the overall EU ETS target (see 1.1)
 - Voluntary cancellation of allowances
 - Linked to national policies (e.g. coal phase-out)
 - Not linked to national policies
 - Revision of the Market Stability Reserve's parameters
 - Increase cancellation of allowances
 - Increase net uptake of allowances by the MSR in the period 2021-2030



2.2 Issues

- Danger of fragmentation of climate policies and efforts
- Perception of unilateral action or action by a coalition of MS
 - Sufficiently large and transparent to provide a credible signal and useful addition to the EU NDC?
 - Domestic and international perception?
- Care is necessary in terms of how cancellations of allowances are done
 - Minimise potential market distortions arising from voluntary cancellation and MSR functioning



2.3 Increase efforts in other areas

- Climate efforts and commitments could also be taken in other areas, without adapting the EU ETS or ESR targets/functioning. Other areas include:
 - Clean Energy Package targets recently agreed
 - EU Multiannual Financial Framework
 - Standards (such as vehicle/building standards)
 - Trade policy
 - Green mobility
- Actors that could take action in other areas include:
 - EU
 - individual Member States
 - groups of Member States
 - economic sectors, cities, individual companies, etc.



2.3 Issues

- Large danger of fragmentation of climate policies and efforts
 - EU-wide commitments show stronger signal than actions at other levels of governance
- Perception
 - Actions by sectors, cities, companies etc. included in NDC?
 - Sufficiently large and transparent commitments?
 - Quantification of these efforts?



Structure: 3 major approaches

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3. Use of international cooperative mechanisms

 The current EU NDC specifies that the EU's target is to be reached domestically.

- An enhanced EU NDC could add an international pillar to the domestic target
 - without updating the NDC's current domestic target, or
 - included in a new headline target.



3. Use of international cooperative mechanisms

 Action could be taken at EU level or other governance levels

- No need for revisiting domestic policies
 - Unless to okay international credits for compliance in ETS or ESR

- Powerful signal that the EU is willing to engage with other Parties
 - Raise ambition together



Main approach 3: use of international cooperative mechanisms in addition to domestic target

Three main options for this approach

Option 7: Use of international markets

Option 8: Climate finance

Option 9: Innovation, technology and capacity building



3.1 Use of international markets

- International markets could be used by the EU, individual Member States or a group of Member States.
- Credits will need to be of the highest standard in terms
 of environmental integrity and additionality Articles 6.2
 and 6.4 mechanisms under the Paris Agreement
- Gives EU credibility in Art 6 negotiations
 - EU as a source of demand for credits



3.1 Use of international markets

- If Art 6 negotiations do not result in sufficient trust EU stakeholders in credits
 - EU could add additional requirements for credits, projects, vintage, location, etc.

Lower marginal abatement cost in third countries



3.1 Issues

- Budgetary implications/restrictions
- Historical issues with environmental integrity and additionality of crediting mechanisms
 - Oeko Institut: only 2% of reviewed CDM projects highly likely to be additional
- Will the Article 6 mechanism of the Paris Agreement be operational in time?
- Is increased spending outside the EU considered acceptable?
- Strong reliance on international credits might not be acceptable to other Parties and domestic stakeholders



3.2 Climate finance

- Increased contributions to climate finance through
 - Bilateral commitments
 - Multilateral mechanisms

 Could be done by the EU, individual Member States or groups of Member States

New commitments will have to be additional to previous ones



3.2 Issues

Budgetary implications/restrictions

 Previous commitments have not been fulfilled yet – will new commitments be considered as an increase in ambition by civil society and other Parties?

 Is increased spending outside the EU considered acceptable?



3.3 Innovation, technology transfer and capacity building

- 'Softer' option compared with using markets and climate finance
- International cooperation in terms of developing and disseminating green technology
 - e.g. through the UNFCCC's Technology Mechanism
- Capacity building
 - e.g. through the UNFCCC's Capacity Building Frameworks.



3.3 Issues

- Innovation is considered an important element of the EU's competitiveness
 - challenging to encourage development, diffusion and deployment of new technologies to third parties

- Perception
 - Would commitments in these fields be seen as sufficient increases in ambition by third countries and EU civil society



Survey: criteria and results



Two different (and independent)set of criteria:

- A) Acceptability of an enhanced EU NDC
- 1. Political Acceptability
- 2. Social Acceptability

- **RATINGS 1-5:**
- 1. Not acceptable;
- 2. Low acceptability;
- 3. Acceptable;
- 4. High acceptability;
- 5. Very high acceptability.

- B) Impact on various dimensions
- 1. Competitiveness
- 2. Environment
- 3. International context

RATINGS 1-5:

- 1. Highly negative impact;
- 2. Negative impact;
- 3. No impact;
- 4. Positive impact;
- 5. Highly positive impact



Political Acceptability

Any changes to the current EU NDC need to be politically acceptable, as the European Council will need to agree on the changes. This implies that Member States not only acknowledge that the NDC needs to be updated and enhanced, but also agree on the way forward to do so. This is especially important with regards to enhancing the NDC in a timely fashion.

Ratings: not acceptable, low acceptability, acceptable, high acceptability, very high acceptability



Social Acceptability

Social acceptability is related to the way society at large, public opinion, would react and accept the social impact of an enhanced EU NDC – which includes changes in employment in economic sectors and possible behavioral changes necessary to reach the climate goals.

Ratings: not acceptable, low acceptability, acceptable, high acceptability, very high acceptability



Impact on Competitiveness

The degree in which the enhancement of the EU NDC affects the competitiveness of the EU industry compared to other countries. The competitiveness impacts could be short-term and/or long-term.

Ratings: high negative impact, negative impact, no impact, positive impact and high positive impact



Environmental Impact

The enhanced EU NDC's main environmental impacts concern its effect on GHG emissions in the EU and global climate change mitigation. Please only consider GHG emissions, and not other potential impacts such as air and water pollution, land use, land use change etc.

Ratings: high negative impact, negative impact, no impact, positive impact and high positive impact



International Impact

International impact concerns the manner in which the international community would perceive and respond to an enhanced EU NDC. It concerns the impact of the enhanced EU NDC on the international climate negotiations under the auspices of the UNFCCC, including third countries' revision of their own NDCs.

Ratings: high negative impact, negative impact, no impact, positive impact and high positive impact



The Matrix

Average rating in cells

1= "bad/undesirable": not acceptable/high negative impact;

5= "good/desirable": very high acceptability/highly positive impact

Color cells: green >3, red < 3, white = 3

Options / Criteria	Political Acceptability	Social Acceptability	Competitiveness Impact	Environmental Impact	International Impact
Enhance the headline target and adjust EU climate legislation	2.61	3.00	2.80	4.10	3.88
Change the single-year emission reduction target to a carbon budget	2.79	3.11	3.02	3.79	3.55
Increase the scope of the NDC	2.50	3.04	2.77	3.94	3.34
Increase the ambition of the ESR, without adapting the headline target	2.60	2.81	3.02	3.85	3.55
Increase the ambition of the EU ETS, without adapting the headline target	2.55	3.00	2.65	3.80	3.50
Increased efforts in other areas, without adapting the headline target	3.18	3.28	3.21	3.93	3.56
Use of international markets	2.98	2.80	3.45	3.70	3.87
Climate finance at the international level	2.84	2.98	3.30	3.91	3.96
Innovation, technology transfer and capacity building	3.25	3.32	3.37	4.00	4.00

A few comments

By criteria (vertically):

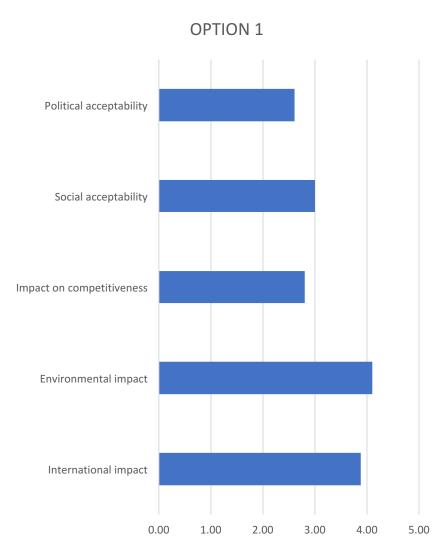
- No trade-off among various options on env and int impacts: a EU enhanced NDC has
 a positive env and int impact
- Low politically acceptability, mixed results on competitiveness and social acceptability

By options (horizontally):

- Options 1, 3 and 5 (Enhance headline target; Increase scope of EU NDC; Increase ambition of EU ETS) have low political acceptability and negative impact on competitiveness
- Options 4 (Increase ambition of ESR) has both low political and social acceptability
- Options 2, 7 and 8 (Carbon budget; International markets; Climate finance) show intermediate results with low acceptability but positive impacts
- Options 6 and 9 (Increased efforts in other areas; Innovation & tech transfer)
 received the highest scores



Option 1 - Enhance the headline target and adjust EU climate legislation



Political acceptability

- negotiations just finished on ETS and ESR - difficult to restart; Laggard MS will need to be convinced
- reviewed RE and EE allow for revisiting headline target even without adapting legislation

Social acceptability

- populism as a challenge for further climate efforts
- need to focus on growth, jobs and innovation



Option 1 - Enhance the headline target and adjust EU climate legislation

competitiveness impact

- 55% negative to high negative impact
- Short-term negative impacts medium to long-term positive impacts (first mover advantage)
- no impacts have materialised yet, plus protections are built in into ETS
- some industries (oil and gas companies) will be impacted, some won't (electric mobility).

environmental impact

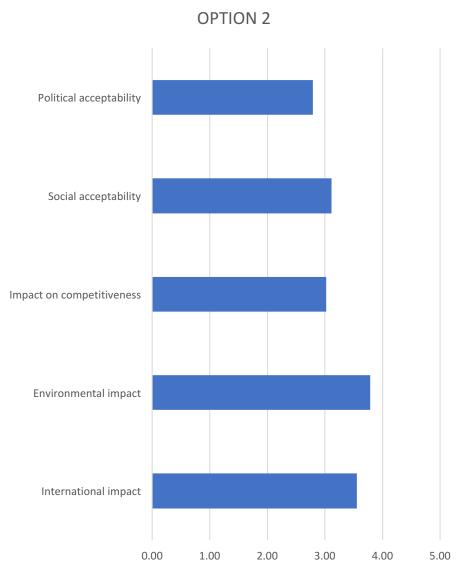
- 85% positive to high positive impact impact
- could create international momentum

- 75% positive to high positive impact
- reinforce the EU negotiating stance and leadership for other countries
- most visible option internationally
- 54 need for international cooperation and coordination





Option 2 – Change to carbon budget



Political acceptability

- 35% low pol acceptable
- already a link to ETS and ESR budget approach exist
- depends on whether an increase in ambition is put in, or it is just a translation of existing measures
- many actors support a budget approach (EP, civil society)

Social acceptability

- 75% socially acceptable-high social acceptability
- low distributional impacts
- just transition and social justice question
- easier communication tool



Option 2 – Change to emission budget

competitiveness

- 25% no to low impact
- only impact if ambition is also raised

environmental impact

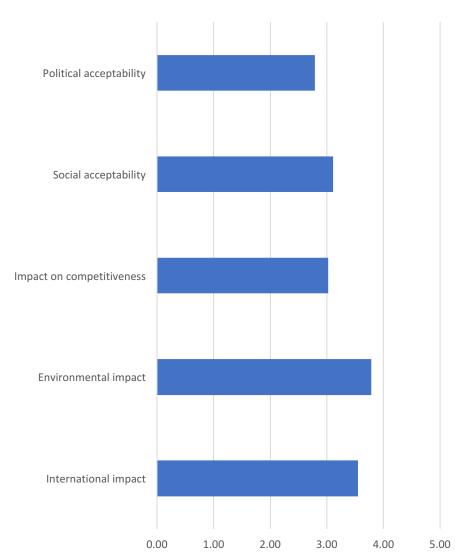
- 65% significant to high environmental impacts
- depends on effective implementation
- depends on level of budget

- shows leadership and can create momentum
- could be contested in international negotiations no matter the level the budget is set at



Option 3 – Increase the scope of the NDC





Political acceptability

- 65% low pol acceptability
- strong opposition by specific member states and interest groups
- could cause problems in international negotiations at ICAO and IMO

Social acceptability

- 70% socially acceptable
- potential for distributional impacts
- limited social impacts (jobs) due to inelastic demand for these sectors
- perceived as a progressive climate change policy (air travel is for richer people)





Option 3 – Increase the scope of the NDC

competitiveness impact

- 80% negative to no impact
- potential for cost pass through

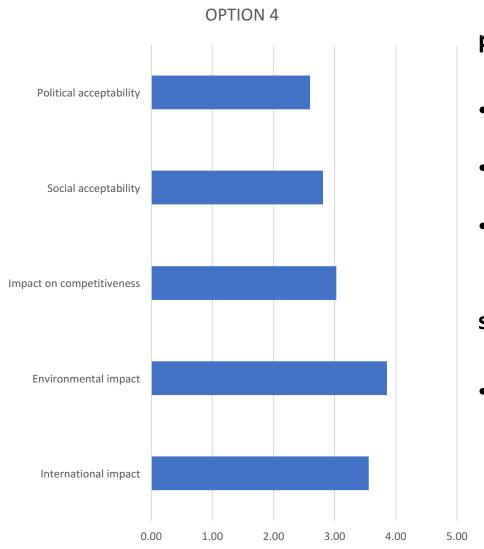
environmental impact

- 80% positive to high positive environmental impact
- aviation and shipping are large and growing emitters

- 50% positive to high positive impacts
- negotiations at ICAO and IMO still ongoing, potentially undermine them
- might foster strong international opposition
- shows leadership on tackling the emissions from these sectors



Option 4 – Increase ambition ESR, without adapting headline target



political acceptability

- difficult new effort sharing negotiation
- different approaches between MS could lead to opposition
- possible inner opposition to stringent unilateral efforts?

social acceptability

 burden will fall on households (transport, buildings, waste, agriculture)

Option 4 – Increase ambition ESR, without adapting headline target

competitiveness impact

- low-to no impact, many sectors in ESR are not tradable
- unilateral actions could lead to less even playing field

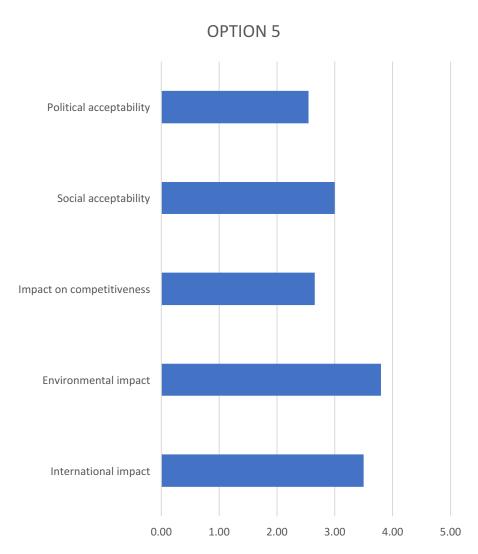
environmental impact

- 75% positive to high positive impact
- depends on implementation and set up

- More than 50% positive international impact
- Being a voluntary measure, would give no clear signal at the international level; limited expected impact on other Parties under Paris Agreement



Option 5 – Increase ambition EU ETS, without adapting headline target



political acceptability

- 55% low acceptability
- opposition in some MS
- depends on implementation

social acceptability

- 75% socially acceptable
- Negative impact of a higher carbon price in certain MS still heavily relying on energy production from fossil fuels.



European Roundtable on Climate Change and

Option 5 – Increase ambition EU ETS, without adapting headline target

competitiveness impact

- 46% high negative to negative impact
- strong carbon leakage protection measures already exist
- would probably be linked to more carbon leakage protection

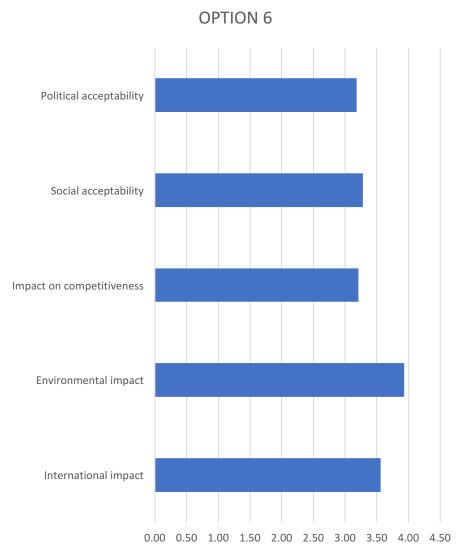
environmental impact

- 70% positive to high positive impact
- stronger if done at EU level (not unilateral action)

- 50% positive international impact
- signal of success carbon pricing approach in EU, if price increases
- EU could show leadership in climate policy negotiations



Option 6 – Other areas, without adapting headline target



political acceptability

- 80% political acceptability
- flexible approach could be politically viable, but have limited effectiveness
- MS action less politically feasible compared to EU level action for certain MS

social acceptability

- 80% social acceptability
- depending on the actual measures and which climate stringency options are chosen.





Option 6 – Other areas, without adapting headline target

competitiveness impact

- 42% positive impact
- self-selection of action is considered too flexible and probably lead to limited impacts

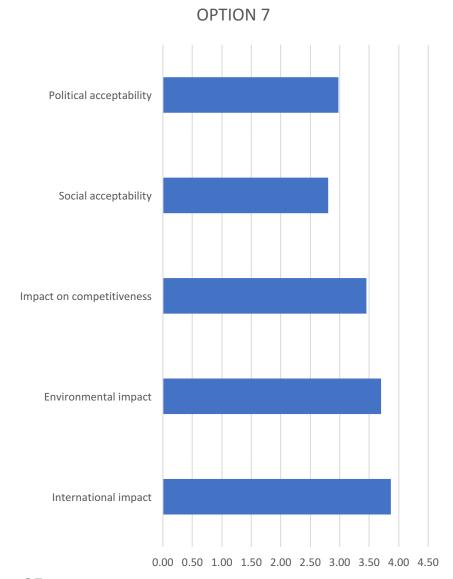
environmental impact

- 80% positive to high positive environmental impacts
- needs of clarity, concrete actions beyond targets and lock in of commitments

- 50% positive to high positive impact
- not as visible as other options
- depends on implementation



Option 7 – Use of international markets



political acceptability

- negative experience with past KP instruments (additionality and environmental integrity)
- environmental integrity is key
- difficulty at time of budget constraints
- decisions have already been taken not to use international credits

social acceptability

- offsets seen as cheating vs domestic reduction action
- potential for cost pass through





Option 7 – Use of international markets

competitiveness impact

- possible positive impact on the EU: first mover advantage
- possible positive impact abroad: contributes to climate action in other countries

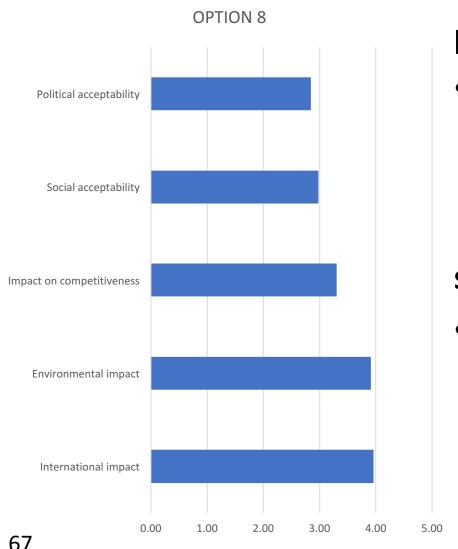
environmental impact

- 70% positive to high positive environmental impacts
- carbon credits can help enhance global action
- however, additionality is critical

- 70% positive to high positive international impacts
- could be followed internationally
- benefit to host countries



Option 8 – Climate finance on the international level



political acceptability

 42% not politically acceptable to low political acceptability

social acceptability

 65% socially acceptable to high social acceptability

Option 8 – Climate finance on the international level

competitiveness impact

• 37% positive to high positive impact

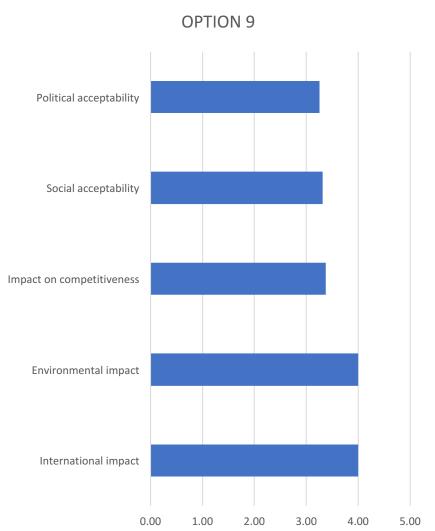
environmental impact

- 80% positive to high positive environmental impact
- potential for impact in third countries, but no impact on EU emissions

- 78% positive to high positive international impact
- key to securing buy in for Paris Agreement



Option 9 - Innovation, technology transfer and capacity building



political acceptability

 85% politically acceptable to high political acceptability

social acceptability

 90% socially acceptable to high social acceptability

Option 9 - Innovation, technology transfer and capacity building

competitiveness impact

create markets for climate technologies

environmental impact

- 85% positive to high positive environmental impact
- fast spread of climate efficient technologies

international impact

85% positive to high positive international impacts



Concluding remarks

- Multiple complimentary methods: quantitative/qualitative approach
- Quantitative approach: no ranking among options, just possible trade-offs
- Qualitative approach: interesting insights beyond numbers



Some overall conclusions (1)

- Stakeholder and expert views on the options seem to be stuck in the middle, with no extreme results at this time.
- Importance of intra-EU solidarity and the need for an international approach were repeatedly highlighted.
- All options are expected to lead to positive environmental and international outcomes.
- Political acceptability for revising the EU NDC is not perceived as very high at this time.



Some overall conclusions (2)

- There seems to be some level of correlation between the impact on competitiveness and social acceptability.
- Timing and sequencing of the NDC revision and revision of policies and instruments also important.
- The use of international markets receives mixed results.
- Continuous engagement with stakeholders and debate on the EU Long-term climate strategy necessary.
- Will outcomes of COP24 and the Talanoa Dialogue cause momentum for revising the EU NDC?

