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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





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
 - LULUCF Regulation





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
- Current legislation would de facto lead to emission reductions 'slightly over 45% by 2030'
- The world is currently not doing enough
 - UNEP's GAP Report, IPCC's 1.5°C Special Report, etc.





Structure: 5 major approaches

- Change the domestic headline target of the EU NDC and adjust main climate legislation.
- 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
- 4. Improve the communicative quality of the NDC
- 5. Combining elements from any/all of the above





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1. Changing the domestic headline target

- 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.
- This option represents action by the EU as a whole (no 'fragmentation')



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

Three main options for this approach

- I. (Option 1) Enhance the headline target and adjust EU climate legislation
- II. (Option 2) Change the single-year emissions reduction target to a carbon budget
- III. (Option 3) Increase the scope of the NDC





1.1 Enhance the headline target and adjust legislation

- Increase headline target and adjust EU climate legislation accordingly – ETS or ESR most likely candidates
- Examples include
 - Increase the linear reduction factor in the ETS
 - Adjust the functioning of the MSR: greater uptake or cancel larger quantities of allowances.
 - Increase Member States' ESR targets.
 - Secondary targets could be mandated for sectors covered by either ETS or ESR
 - Mandating emission reductions for a given sector, for example phasing out fossil fueled vehicles in the transport sector





1.1 Issues

- Changing the existing climate legislation will likely have to go through the full ordinary legislative procedure
- 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
- Changing climate legislation should not undermine the functioning of the policy
 - For example waterbed effects in the ETS
- Are EU Member States willing to reopen the energy and climate framework after just having finished a long period of negotiations?





1.2 From single-year to a carbon budget

- The current NDC target is a single-year target, meaning that the emissions profile over time to reach the target are in theory flexible, and environmental consequences uncertain.
- A carbon budget would provide clarity, from an environmental, scientific and investment perspective.
- It represents an increase in ambition as a limit is placed on cumulative EU GHG emissions.



1.2 Issues

- While the NDC represents a single-year target, the EU's two main climate policies work through budgets
 - If we aggregate those budgets into one EU budget, would it be considered an increase in ambition?
- If a budgetary approach is to be implemented, an additional discussion will need to be had on defining the budget and how it is set.
 - Yearly targets? LRF?
- This discussion could also include the selection of a starting year for the budget
 - 1990, most recent data available, 2021?
- International response
 - Attract discussion and criticism, or
 - 12 Provide momentum to spread this 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 maritime or aviation emissions.
- While tackling climate change is currently under discussion in their respective UN bodies, the EU could in theory add either or both sectors to its NDC to show leadership in tackling emissions from these sources.



1.3 Issues

- Emissions from both sources will need to be tackled/further tackled at some point
- Inclusion of these sectors could impact efforts to do so in the UN bodies,
 - Hamper efforts due to expected international response
 - Increase pressure for strong mechanisms on ICAO and IMO (e.g. 'stop the clock')
- Are EU Member States willing to reopen the energy and climate framework after just having finished a long period of negotiations?





Structure: 5 major approaches

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- 5. Combining elements from any/all of the above





2. Increase ambition without adjusting headline NDC target

 Ambition can also be increased without adjusting the headline NDC target

 This could be done either by the EU as a whole, a coalition of more ambitious Member States, a single Member State, or even by cities, economic sectors or individual companies.



Main approach 2: increase ambition without adjusting headline NDC target

Three main options for this approach

- (Option 4) Increasing the ambition of the ESR
- II. (Option 5) Increasing the ambition of the EU ETS
- III. (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 individual or by groups of Member States
 - Cooperation between a group of Member States e.g. through cross-border mechanisms to increase investments in a specific sector
 - 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 MS
 - Sufficiently large and transparent to provide a credible signal and useful addition to the EU NDC?
- 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?
- Care is necessary in terms of how cancellations of allowances are done
 - minimise potential market distortions arising from voluntary cancellation.





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 standards)
- 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
- Perception
 - Actions by sectors, cities, companies etc. included in NDC?
 - Sufficiently large and transparent commitments?
 - Quantification of these efforts?
- Greening trade policy in line with WTO rules is a sensitive subject



Structure: 5 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.





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
- II. (Option 8) Climate finance
- III. (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?
- Option for 'net global mitigation strategy' net benefit for the environment.



3.1 Issues

- Budgetary implications/restrictions
- Historical issues with environmental integrity and additionality of crediting mechanisms
- Will the Article 6 mechanism of the Paris Agreement be operational in time?
- Is increased spending outside the EU considered acceptable?





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



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4. Improve the communicative quality of the NDC

• Improving the communicative strength of the EU's commitments can also support the Paris process.

- Current EU NDC is quite brief and not detailed
 - Increase clarity and transparency of NDC
 - Elaborate on the policies to achieve our NDC
 - Serve as example for other Parties





4. Improve the communicative quality of the NDC

Examples:

- Elaborate on the EU's internal effort sharing of emission reductions
 - stipulated by Article 4.16 of the Paris Agreement
- Add details and clarifications on the EU's climate change tools and policies
- Update the NDC by reflecting on on-going climate action and changes to the Energy and Climate Framework
- Conclusions of the new strategy for 'long-term EU GHG emission reductions'
 - clarify the EU's long-term decarbonisation pathways.





4. Issues

- Perception: Would improving the communicative quality of the NDC, without additional commitments, be considered a real enhancement of the EU's NDC?
 - What would be the reaction of citizens, NGOs and other Parties?
- Could these be no-regret options to be combined with other options?



Structure: 5 major approaches

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Conclusion: overarching issues

- Political willingness to revisit climate policy now
- Timing
 - Make commitments now, but work them into legislation during scheduled reviews
 - In 2023 ambition has to be revisited again
- Perception by civil society and third countries
 - Are commitments sufficient to show leadership and create momentum?
 - Is it acceptable to add an international pillar without additional domestic efforts?
- Do all EU commitments need to be quantifiable?
 - In emission reductions? Or in budgetary outlay?
- How to combine various options into a package?





Survey: 9 options tested

- Option 1: Enhance the headline target and adjust EU climate legislation
- Option 2: Change the single-year emission reduction target to a carbon budget
- Option 3: Increase the scope of the NDC
- Option 4: Increase the ambition of the ESR, without adapting the headline target
- Option 5: Increase the ambition of the EU ETS, without adapting the headline target
- Option 6: Increased efforts in other areas, without adapting the headline target
- Option 7: Use of international markets
- Option 8: Climate finance on the international level
- Option 9: Innovation, technology transfer and capacity building





Survey: criteria and results







The criteria

- 1. Political Acceptability
- 2. Impact on competitiveness
- 3. Social Acceptability
- 4. Environmental Impact
- 5. International impact





Political acceptability

Any change to the current EU NDC needs 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.





Impact on competitiveness

The degree in which the enhancement of the EU NDC affects the competitiveness of the EU industry compared to other countries, through for example, compliance costs for industry or indirect carbon costs being passed through.





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. It could be construed as having social, economic and political aspects.





Environmental Impact

The enhanced EU NDC environmental impacts could be identified on a number of axes.

Among them, the most important impact concerns its effect on GHG emissions in the EU and global climate change mitigation. An enhanced EU NDC needs to be seen as contributing substantially to climate change mitigation efforts. However, additional potential impacts may concern air and water pollution, land use, land use change etc...





International impact

International impact concerns the way an enhanced EU NDC would be perceived by the international community, and how the latter would react to it.

The policies implemented to achieve the enhanced NDC may have impacts that occur in jurisdictions other than those where they were implemented (international spillovers). These impacts can be both positive and negative, and can be either economic, social and/or environmental in nature. They can be closely related to changes in trade and/or investment patterns.





The Matrix

Limited sample (18 respondents) from a sample of 43 selected individuals

Average rates in cells (1="bad/undesirable", 5="good/desirable")

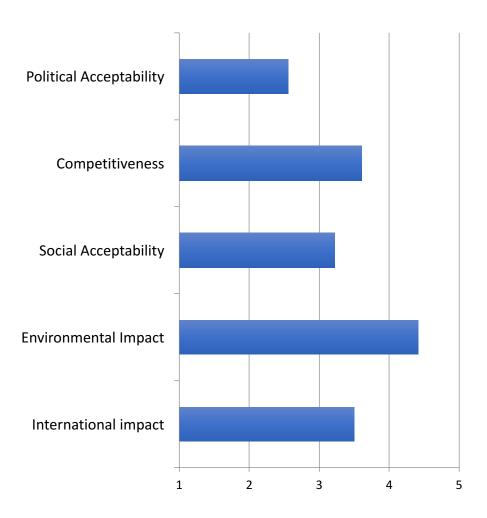
Color cells: red <2.6, $2.6 \le$ white ≤ 3.4 , green >3.4

Options		Competiti			Internatio
	Accept	on	Accept	ent	n
Option 1: Enhance the headline target and adjust EU					
climate legislation	2.56	3.61	3.22	4.41	3.50
Option 2: Change the single-year emission reduction					
target to a carbon budget	3.06	3.94	3.53	3.19	2.65
Option 3: Increase the scope of the NDC	2.63	3.59	3.24	3.33	3.38
Option 4: Increase the ambition of the ESR, without					
adapting the headline target	2.78	3.33	2.65	2.80	2.25
Option 5: Increase the ambition of the EU ETS,					
without adapting the headline target	2.59	3.59	3.18	3.06	2.65
Option 6: Increased efforts in other areas, without					
adapting the headline target	3.50	4.00	3.63	2.5	2.375
Option 7: Use of international markets	2.72	3.94	2.38	2.00	3.00
Option 8: Climate finance on the international level	3.24	4.29	3.29	3.06	3.65
Option 9: Innovation, technology transfer and capacity					
building	3.44	3.41	3.13	3.06	3.25
				International Centre	for Trade Climate Change and Sustainable Transition

A few comments

- Competitive impacts are considered low in most cases
- Option 1 (enhance target) have several advantages but low political acceptability
- Options 4 and 7 ("Increase the ambition of the ESR, without adapting the headline target" and "Use of international markets") are the least preferred options (more red than green cells).
- Options 2, 8 and 9 (carbon budget; climate finance; innovation, technology transfer and capacity building) received the highest scores
- Overall picture relatively robust to different thresholds
- Comments in following slides are selected from responses to open questions

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



Political acceptability

- Negotiations just finished on ETS and ESR
 - difficult to restart
 - some MS will need to be convinced
- Reviewed RE and EE allow for revisiting headline target without even adapting legislation

Competitiveness

- ≈60% of respondents reply 'no' to 'low' impact
- short term negative impacts versus medium to long term positive impacts (such as first mover advantage)
- no impacts have materialised yet, plus protections are built in into ETS
- some industries will be impacted, some won't. Issue will become one of just transition





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

Social acceptability

- Populism might be a challenge for further climate efforts
- There is a need to focus on growth, jobs and innovation

Environmental impact

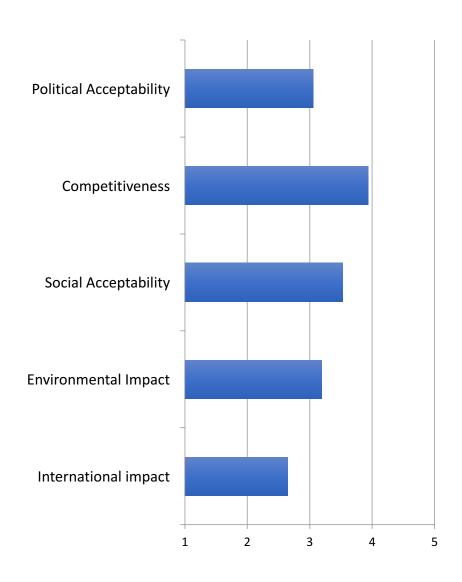
- ≈85% of respondents reply 'significant' to 'very high' environmental impacts
- Could create international momentum (multiplier effect)
- Carbon leakage is a threat to environmental impact

- ≈85% of respondents reply 'significant' to 'very high' environmental impact
- This option could show leadership and example for other countries
- Could create competition in low carbon technologies
- This option would have the most visibility on the international level





Option 2 – Change to emission budget



Political acceptability

- ≈2/3^{rds} of respondents indicate that it is politically acceptable to very high political acceptability
- There is already a budgetary approach in ETS and ESR
- Acceptability depends on whether current commitments are simply translated into a budget, or whether ambition is simultaneously increased
- Many actors support a budget approach (EP, civil society)

Competitiveness

- ≈60% of respondents indicate 'no' to 'low' impact
- Impact depends on whether ambition is also raised





Option 2 – Change to emission budget

Social acceptability

- ≈75% of respondents indicate that it is 'acceptable' to 'high social acceptability'
- Expected low distributional impacts
- Again: issue of just transition and social justice
- How hot air is addressed could have a strong impact
- A budget could be considered an easier communication tool

Environmental impact

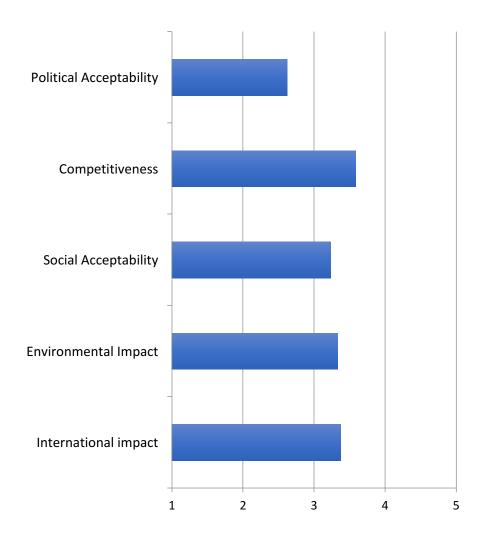
- ≈65% of respondents reply 'significant' to 'high environmental' impacts (on CO2 emissions)
- Size of impact depends on effective implementation and the size of the budget

- A budget could show leadership and can create momentum
- However, it 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

- Strong opposition by specific member states and interest groups
- Strong concern about causing problems in international negotiations at ICAO and IMO

Competitiveness

 Potential for pass through of costs to consumers





Option 3 – Increase the scope of the NDC

Social acceptability

- ≈75% of respondents indicate that it is 'acceptable' to 'very high social acceptability'
- Potential for distributional impacts, however air travel is for richer people
 - A progressive climate change policy?
- Limited social impacts (jobs) due to inelastic demand for these sectors

Environmental impact

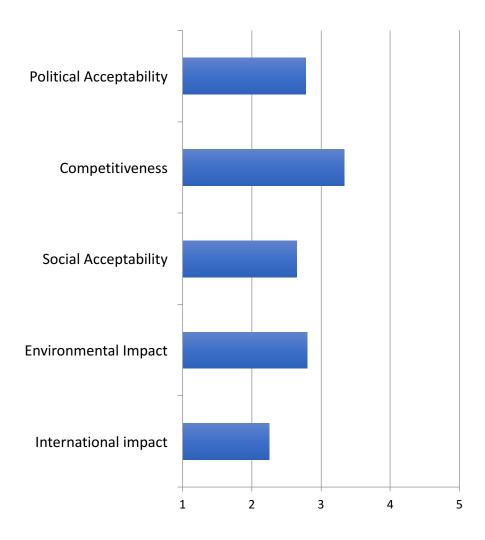
- ≈90% significant to high environmental costs
- Sectors are currently large emitters, and growing fast

- ≈75% significant to very high international impacts
- Potential to undermine ICAO and IMO and 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 Member
 States could lead to opposition
- Possible intra-Member State opposition to stringent unilateral efforts?

Competitiveness

- Many sectors in ESR are not tradable
- Unilateral actions could lead to less even playing field





Option 4 – Increase ambition ESR, without adapting headline target

Social acceptability

 Burden will fall on households (efforts in transport, buildings, waste and agriculture)

Environmental impact

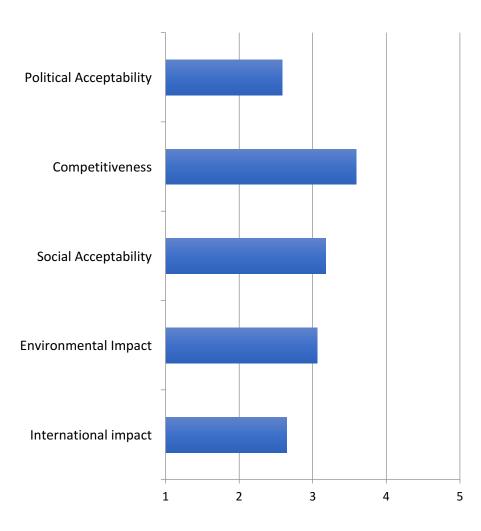
Depends strongly on implementation

- ≈72% of respondents indicate 'no' to 'low' international impacts
- Carbon leakage is a concern (agricultural sector): negative environmental effects if EU imports more food from outside
- 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

- Opposition in some Member States
- Depends on implementation

Competitiveness

- ≈61% of respondents indicate 'no' to 'low' impact
- Strong carbon leakage protection measures already exist
- Would probably be linked to more carbon leakage protection





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

Social acceptability

≈75% 'socially acceptable' to 'very high' social acceptability

Environmental impact

Stronger impact if done at EU (instead of unilateral action)

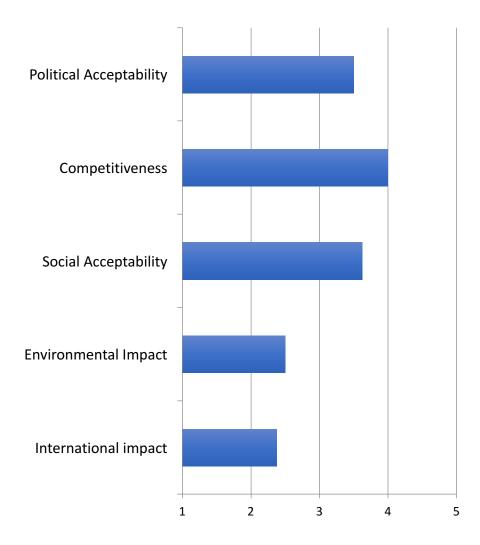
International impact

 Signal of success of the carbon pricing approach in the EU, if it leads to a price increases





Option 6 – Other areas, without adapting headline target



Political acceptability

- ≈85% of respondents indicate it is 'politically acceptable' to 'very high political acceptability'
- Flexible approach could be politically viable, but have limited effectiveness
- Some Member States might consider
 Member State action less politically
 feasible compared to EU level action

Competitiveness

- ≈66% of respondents indicate 'no' to 'low' impact
- Self-selection of action probably leads to limited impacts





Option 6 – Other areas, without adapting headline target

Social acceptability

- ≈75% of respondents reply 'socially acceptable' to 'very high' social acceptability
- But: depends on actual measures

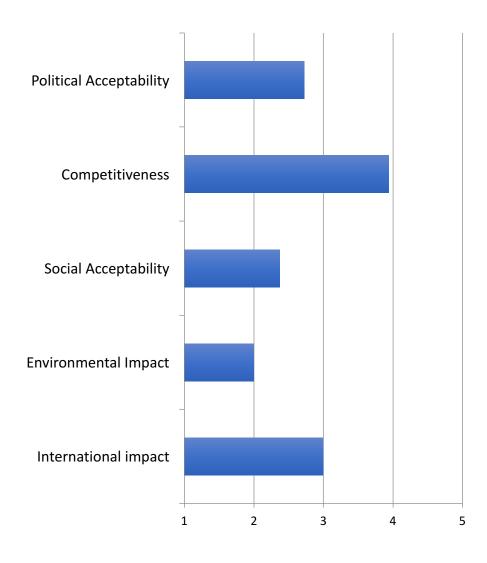
Environmental impact

- 50% of respondents reply 'no' to 'low' environmental impacts
- Any credible commitment in other areas needs clarity, lock-in of commitments and real action

- ≈60% of respondents reply 'no' to 'low' international impacts
- Not as visible as some of the other options
- International signal depends very strongly on implementation and form of commitment



Option 7 – Use of international markets



Political acceptability

- Negative experience with past KP instruments (additionality and environmental integrity)
- Environmental integrity is key
- Difficult in period of budgetary constraints
- The EU has already moved away from using international credits

Competitiveness

- 0% of respondents reply 'high' or 'very high' negative impacts
- Possible positive impact on the EU: first mover advantage
- Contributes to climate action in other countries





Option 7 – Use of international markets

Social acceptability

- Offsets seen as cheating when compared to domestic emission reduction action
- Potential for cost pass through

Environmental impact

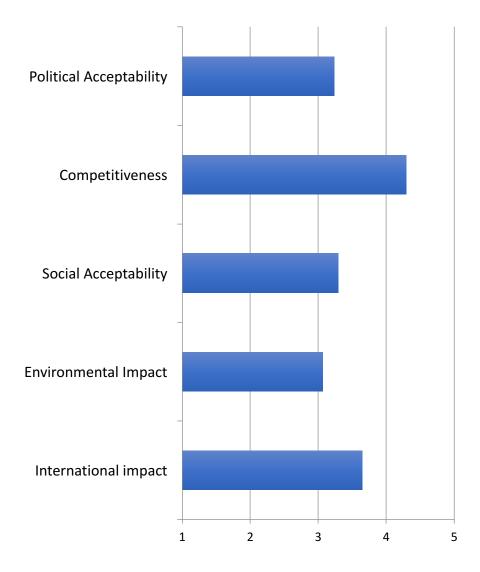
- ≈60% of respondents reply 'no' to 'low' environmental impacts
- Additionality and environmental integrity of units is critical
- Net-zero approach must be avoided

- ≈70% of respondents reply 'significant' to 'high' international impacts
- Could create international momentum
- Strong benefit for host countries





Option 8 – Climate finance on the international level



Political acceptability

- ≈75% 'politically acceptable' to 'very high political acceptability'
- Government budgets are tight
- There is currently a trend of increasing contributions

Competitiveness

 ≈75% of respondents reply 'no' to 'low' impact

Social acceptability

- ≈82% of respondents reply 'socially acceptable' to 'very high' social acceptability
- Investment abroad might not be acceptable





Option 8 – Climate finance on the international level

Environmental impact

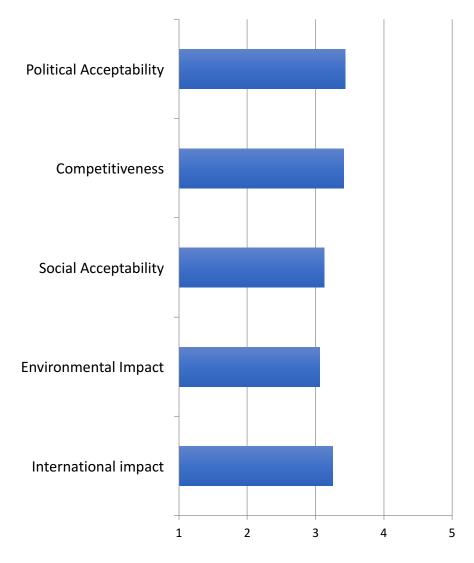
- ≈65% 'significant' to 'high' environmental impacts
- Potential for impact in third countries, but no impact on EU emissions

- ≈88% 'significant' to 'very high' international impacts
- Key to securing buy in for Paris Agreement





Option 9 - Innovation, technology transfer and capacity building



Political acceptability

 ≈85% 'politically acceptable' to 'very high political acceptability'

Competitiveness

 Can create markets for climate technologies

Social acceptability

- ≈72% of respondents reply 'socially acceptable' to 'high social acceptability'
- Will it be considered an increase in ambition?





Option 9 - Innovation, technology transfer and capacity building

Environmental impact

- ≈65% 'significant' to 'very high' environmental impacts
- Fast spread of GHG efficient technologies

International impact

• ≈65% 'significant' to 'very high' international impacts





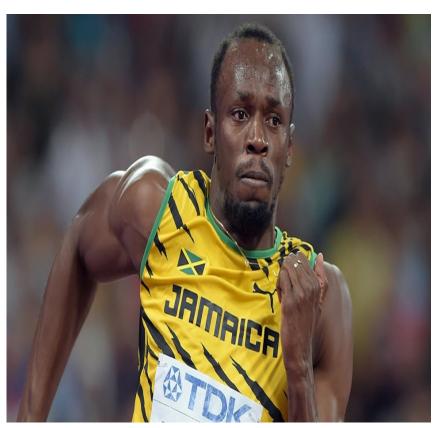
Concluding remarks (1)

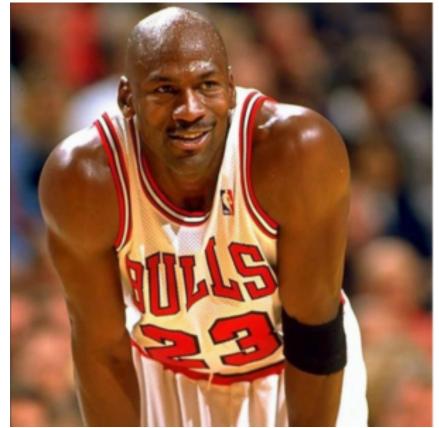
- Preliminary results of a pilot project: to be repeated/extended
- Multiple complimentary methods: quantitative/qualitative approach
- Quantitative approach: no ranking among options, just possible trade-offs
- Qualitative approach: interesting insights beyond numbers





Final thoughts on ambition...









Concluding remarks (2)

- Raising ambition requires:
 - Self-confidence: you know your value
 - Training: you need to prove it
- ...In our context:
 - Self-confidence: inner trust (within EU) requires mutual trust among MS
 - Training: know-how to implement env policies
 - Intertemporal consistency: coherent with announced policy
- Credible → feasible → acceptable → sustainable





Thank you for your attention (and regards from Tuscany)!!



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