

Hot air and other environmental integrity risks under Article 6



Stephanie La Hoz Theuer
Independent researcher

SB46, Bonn, 11 May 2017



Three key messages

1. Article 6 should not lead to higher GHG emissions.
2. Even with **perfect accounting**, two key EI risks remain:
 - a. **Hot air** (surplus from NDCs less stringent than BAU);
 - b. **Crediting of sources outside NDC scope.**
3. Solutions exist, but **compromises required**

Index

1. Theory

What is
environmental
integrity

2. Key risks

Hot air risk

Offscope risk

3. Solutions

Hot air
solutions

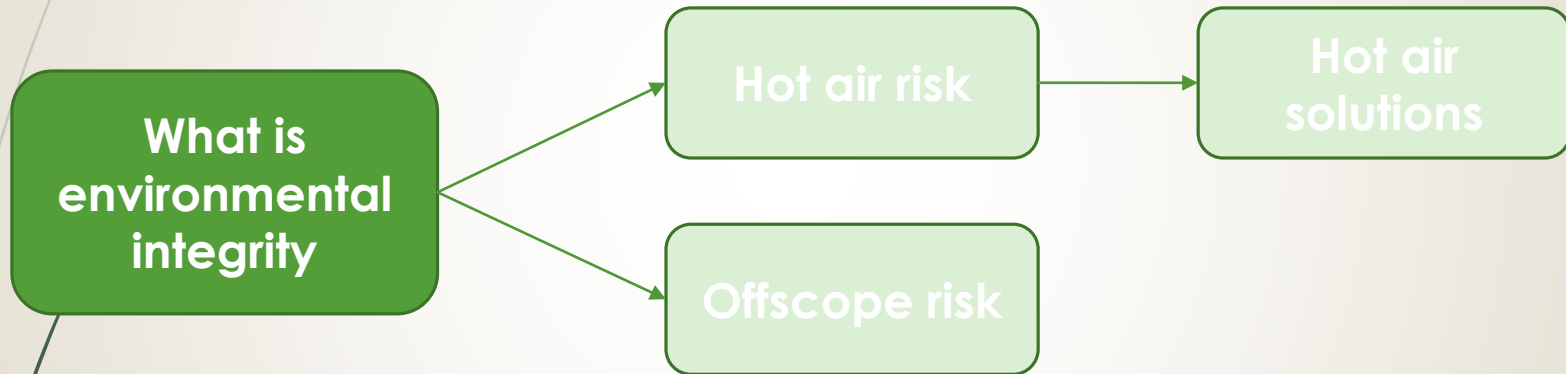
L. Schneider, J. Füssler, S. La Hoz Theuer,
A. Kohli, J. Graichen, S. Healy, D. Broekhoff
(2017). *Ensuring integrity under Article 6 of the
Paris Agreement.*



1. Theory

2. Key risks

3. Solutions





Environmental integrity: a definition

“ The use of international transfers does not result in higher global GHG emissions than if targets had been achieved only through domestic mitigation action. ”

Four influencing factors

- NDC quantification
- Vintages
- Corresp. adjustments
- No double claiming
- etc.

[Robust]
accounting

- Unit is directly related to abatement of at least 1tCO₂e
- Crediting: additional, not overestimated, permanent.
- ETS: loss of unit leads to scarcity

Quality of
units

Incentives
for future
action

- Lower costs can allow more ambition
- But monetization of units can carry perverse incentive

Ambition &
scope of
NDC

- Incentive to ensure unit quality if target is ambitious and units are within scope

1. Theory

What is Env
integrity

2. Key risks

Hot air risk

Offscope risk

3. Solutions

Hot air
solutions



Key risks

- Hot air potential:
 - **2.2 to 3.5 Gt (22% to 66%!) of all ambition in 2030**
 - Mainly from Russia, Turkey, Nigeria, Vietnam, Paraguay, Bangladesh, Ukraine
- Off-scope crediting potential:
 - **6.1Gt** not covered by pledges in 2030.
 - Mainly India and China

1. Theory

What is Env
integrity

2. Key risks

Hot air risk

Offscope risk

3. Solutions

Hot air
solutions

Possible solutions under UNFCCC

➤ **"Principles" & reporting and review**

- Pros: Low international regulation; Lots of flexibility in country-level implementation
- Cons: Relies on identification and correction of problems; No ex-ante assurance

➤ **"Limits" to number of ITMO issuance/transfer/use**

- Pros: If well designed, can provide ex-ante hot air prevention.
- Cons: Stronger international regulation; Robust design could be challenging.

Possible solutions outside UNFCCC

➤ Carbon clubs

- Pros: Possibility for stronger regulation within club.
- Cons: Low ambition clubs!

➤ Green investment schemes

- Pros: If designed as a crediting mechanism, could help ensure integrity of units in government-to-government transfers.
- Cons: Non-universal application makes its usefulness very limited.

➤ Political commitments

Hot air solutions...

- How much ex-ante assurance do we want/need?
 - Is blaming & shaming enough of an incentive?
- Compromises could lead to reducing risks rather than preventing them.
- Sense of urgency: regulatory window of opportunity?
- Find solutions that prevent hot air transfers without limiting the ability of countries with ambitious targets to trade
- Possibility to implement solutions through "accounting" provisions, e.g. limits and even eligibility criteria.



Three key messages

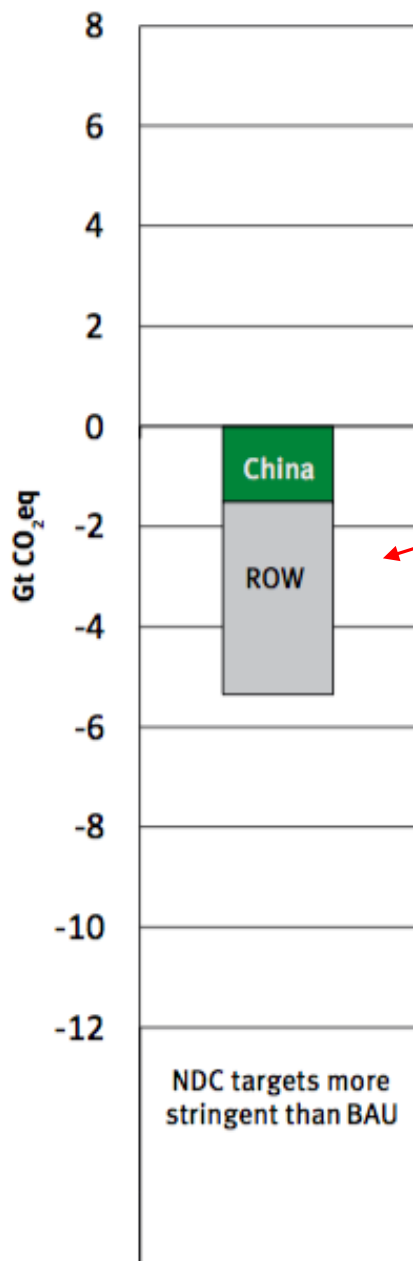
1. Article 6 should not lead to higher GHG emissions.
2. Even with **perfect accounting**, two key EI risks remain:
 - a. **Hot air** (i.e. NDCs less stringent than BAU);
 - b. **Crediting of sources outside NDC scope.**
3. Solutions exist, but **compromises required**

Thank you!

SLaHozTheuer@cantab.net



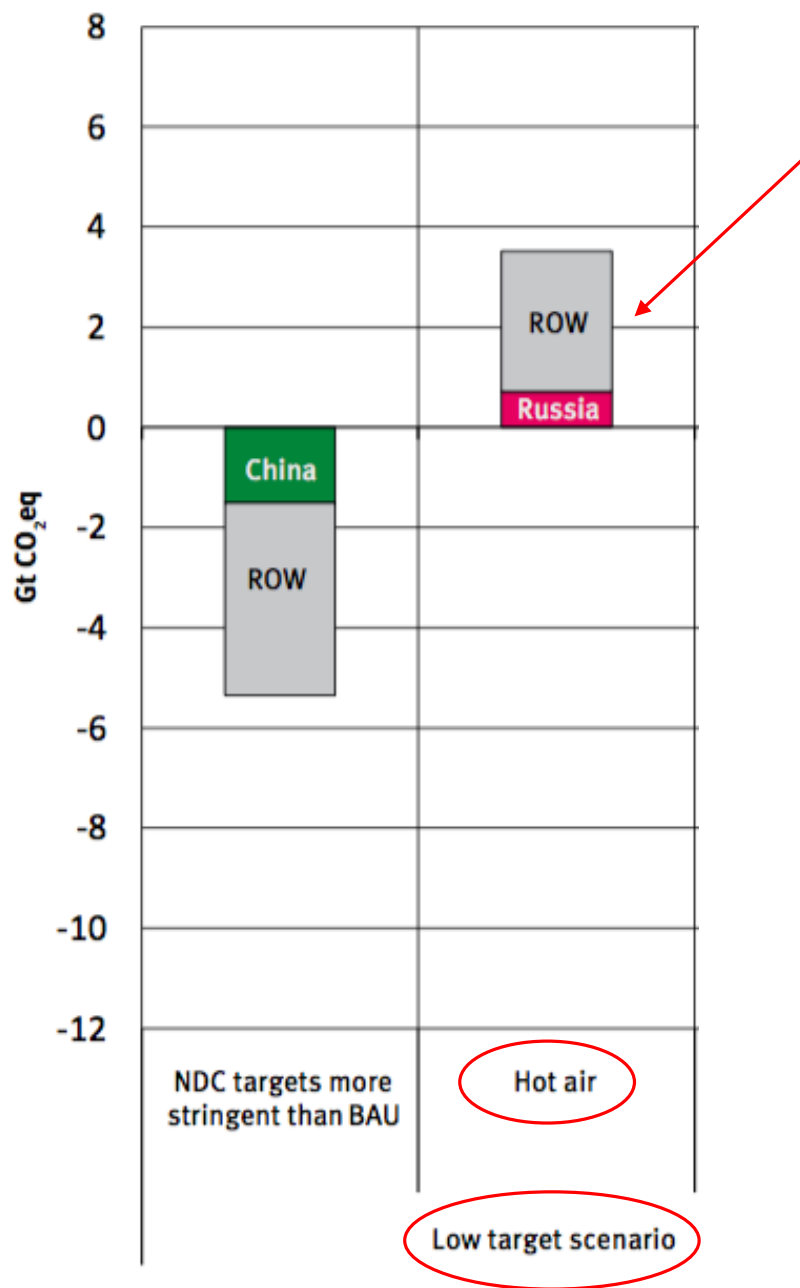
<http://bit.ly/Art6integrity>



Low target scenario:
Ambition of **~5.3 Gt**
in 2030

NDC targets more stringent than BAU

Figure 1: Emission reductions, potential hot air and emissions not covered by NDC targets in 2030



Low target scenario:
Hot air potential
3.5 Gt or 66% of the
ambition in 2030

Figure 1: Emission reductions, potential hot air and emissions not covered by NDC targets in 2030

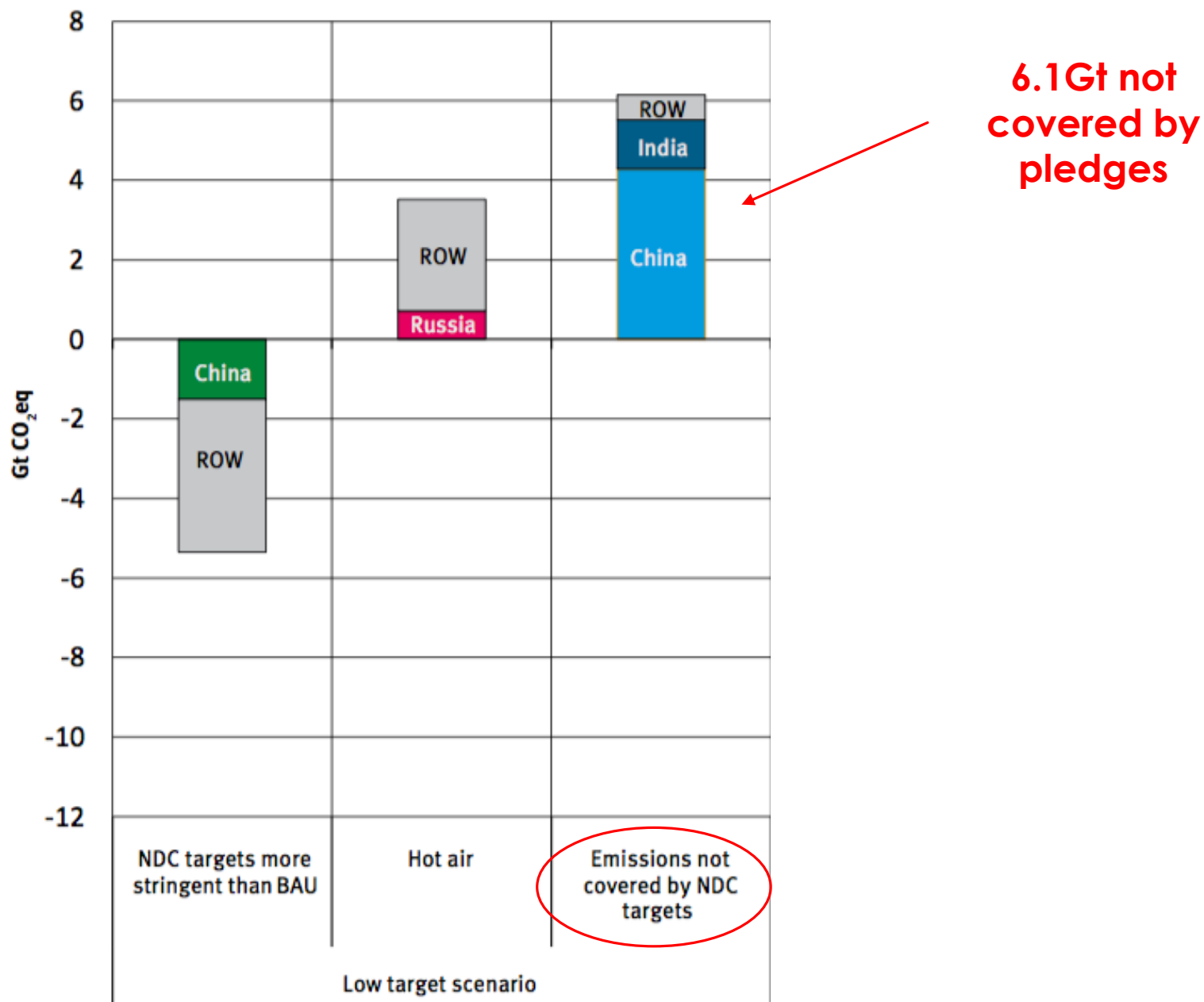


Figure 1: Emission reductions, potential hot air and emissions not covered by NDC targets in 2030

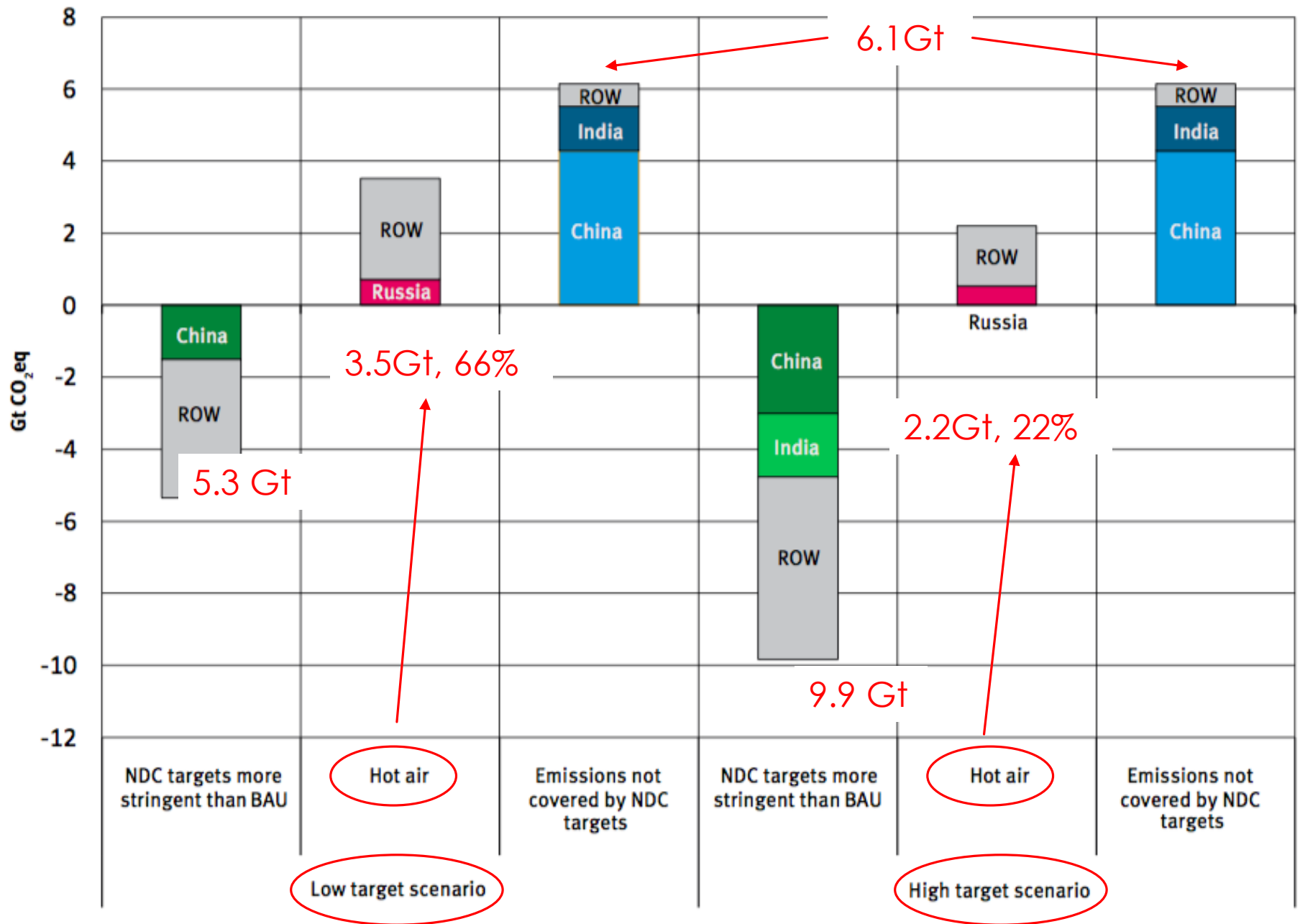


Figure 1: Emission reductions, potential hot air and emissions not covered by NDC targets in 2030