How to design border carbon adjustments for enhanced climate action

Some insights from economic and legal perspectives

Stiftung Wissenschaft und Politik
Deutsches Institut für
Internationale Politik und Sicherheit

Border Carbon Adjustments – why? (1)

International climate policy comes with varying commitments

- Kyoto Protocol 1997 (Developing countries without mitigation obligations), 2nd period ends 2020
- Paris Agreement 2015 (NDCs = nationally determined contributions)

Undesired effect of an ambitious national climate policy: emission activities could move to places without carbon constraints

→ „Carbon Leakage“

→ Undermines global mitigation efforts

One driver of carbon leakage: loss of competitiveness based on climate policy costs (regulation, taxes, other charges) vis-a-vis trade partners

Border Carbon Adjustment – why? (2)

Sectors at risk of carbon leakage should be compensated for CO_2-cost

(a) Behind the border? → reduce CO_2-cost through tax exemptions or free allocation of emission allowances

(b) At the border ? → Increase or introduce CO_2-cost for imports and/or lower CO_2-cost for exports

Climate Economics: Eliminate the CO_2-cost differential between domestic goods and imports and between export goods which compete in third markets. („**Levelling**");
dynamic aspect: establishes incentive for foreign producers to produce climate-friendly

Climate Policy: Incentivise trade partners to improve climate policy („**Leverage**")

BCA - Some calls

- Ernst-Ulrich von Weizsäcker, President of the **Club of Rome** (2 June 2017): 'it would, symbolically, be a lovely idea'
- Rachel S. Williams, Managing Director, **Sandbag** Climate Campaign (11 October 2017): '**border carbon adjustments** merit reconsideration'
- Lakshmi Mittal, Chairman and **CEO**, ArcelorMittal (13 February 2017): 'A **carbon border tax** is the best answer on climate change'
- Emmanuel **Macron**, President of France (26 September 2017): 'une **taxe aux frontières** de l'Europe sur le carbone, c'est **indispensable**.'
- Catherine McKenna, Minister of Environment and Climate Change, **Canada** (11 October 2017): '**Border carbon adjustments** are something we need to look at, ideally through the World Trade Organisation'
- Ursula von der Leyen, President of the European Commission (My agenda for Europe, June 2019): ' To complement this work, and to ensure our companies can compete on a level playing field, I will introduce a **Carbon Border Tax** to avoid carbon leakage.' → see Green Deal announced today (11 December)

Some proposals

Name	Year	Region
Future Allowance Import Requirement (FAIR)	2007	European Union
Carbon Inclusion Mechanism (CIM)	2009	European Union
Border Adjustment Proposal for the Cement Sector	2016	European Union
American Climate and Energy Security Act (HR 2454)	2009	United States
Californian Emissions Trading System	2011	California
Climate Leadership Council (CLC)	2017	United States

Border Carbon Adjustment - how?

Border Carbon Adjustments can take different approaches:

- Tariffs or charges on **imports**
- Regulation (e.g. standards, ETS compliance) for **imports**
- Rebates for **exports**

EU ETS:

- ETS-Directive (2018): a review ‘could’ include consideration of ‘whether it is appropriate to replace, adapt or complement any existing measures to prevent carbon leakage with carbon border adjustments.’
- Green Deal (2019): “... the Commission will propose a carbon border adjustment mechanism, for selected sectors, to reduce the risk of carbon leakage… It would be an alternative to the measures that address the risk of carbon leakage” in the EU ETS.

(how?)

WTO rules

Non-discrimination principles in WTO law:

- Most-Favoured-Nation: equal treatment of trading partners (Art. I GATT) → BCA shd apply to all WTO members
- National Treatment: equal treatment of domestic & foreign products (Art. III GATT); details on imported goods treatment also in Art. II GATT

→ **Exemptions** are possible under specific circumstances:

- Art. XX (b) GATT: measures 'necessary' to protect human, animal or plant life or **health**
- Art. XX (g) GATT: measures 'relating to' the conservation of **exhaustible natural resources**

WTO Agreement on Subsidies and Countervailing Measures

- BCA on exports may qualify as a prohibited export subsidy
- Export rebates may discourage low-emission production and thus undermine the environmental purpose of a BCA.

(how?)

Key design aspects for WTO-compatibility

Consequences from WTO rules for BCAs:

- BCAs should avoid differentiating between trade partners
- BCAs should account for climate efforts of trade partners
- BCAs should ensure basic fairness and due process during design and implementation
- Introduction of a BCA should be preceeded by serious, across-the-board negotiations
- BCAs should demonstrate a sufficient environmental nexus

SWP

(how?)

WTO compatible design in more detail

Differentiation of imports **by country** of origin **should be avoided**, although exempting imports from least-developed countries would be consistent with established practice;

Imported foreign products should be **treated as favorably as** comparable domestic products, meaning that any climate policy obligation for importers **must not be stricter** than the carbon constraint imposed on domestic producers;

Good environmental **performance of foreign producers** should be accounted for, possibly by allowing them to demonstrate their actual performance;

Limiting the scope to carbon-intensive **basic** goods reduces administrative complexity and strengthens the environmental nexus of a border carbon adjustment ;

The adjustment should **apply to imports only**, and not benefit exports;

A fair, transparent, and inclusive **process** should be sought throughout; and

Using **revenue** for climate finance transfers to developing countries can strengthen both the legal and political prospects of a border carbon adjustment.

(how?)

Design Steps for a BCA

1	Determine Scope and Coverage	Products and trade flows, affected countries, and climate policies
2	Calculate the Embedded Carbon	Scope of covered emissions and methodology used for their calculation
3	Determine Adjustment Level	Differential between domestic and foreign carbon constraints
4	Determine Revenue Use	Allocation of revenue to specified countries and purposes
5	Decide Expiration	Periodic review and expiration once leakage rate falls below a certain level

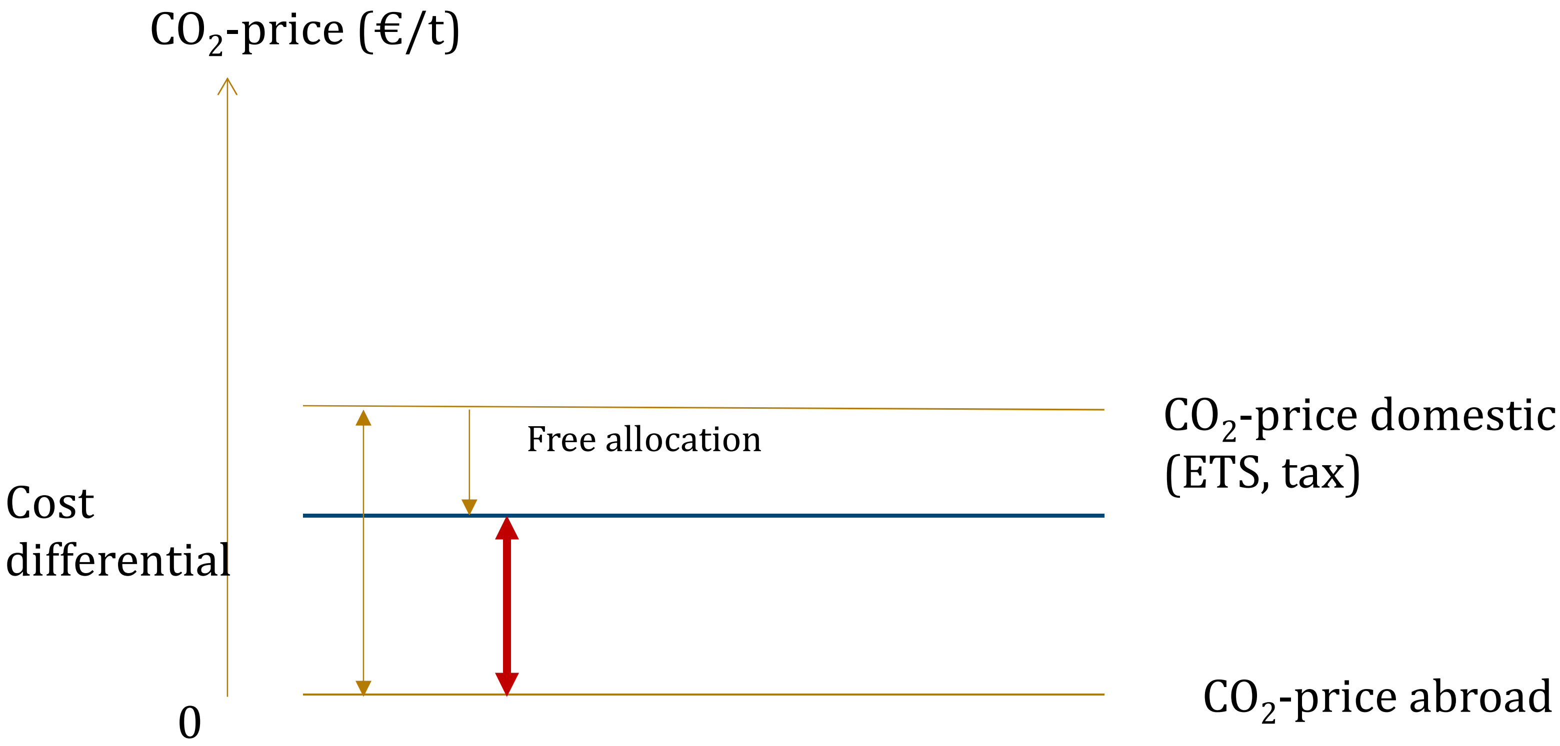
SWP

(who?)

BCA proposals for the EU ETS

Proposal	Sectoral Coverage	Country Coverage	Exports Included?	Calculation
2007 FAIR Proposal	Sectors at risk of carbon leakage (methodology not specified)	All, except those taking comparable action or operating an ETS linked to the EU ETS	Yes, based on actual exports	Average carbon intensity of relevant EU goods, corrected for average free allocation
2009 French Non-Paper	Sectors at risk of carbon leakage (methodology as used in the EU ETS)	All, except 'less advanced countries' and those either imposing an equivalent carbon cost or participating in a (qualified) future international climate treaty	Possibly, pending further study	Average carbon intensity of relevant EU goods, corrected for benchmark-based free allocation
2016 French Non-Paper (2019 Non-Paper update)	Cement and clinker initially, to be gradually expanded to other sectors at risk of carbon leakage	All, except countries with adequate mitigation efforts and/or comparable carbon price	No	Average carbon intensity of relevant EU goods (or less, if lower emissions are demonstrated) corrected for benchmark-based free allocation

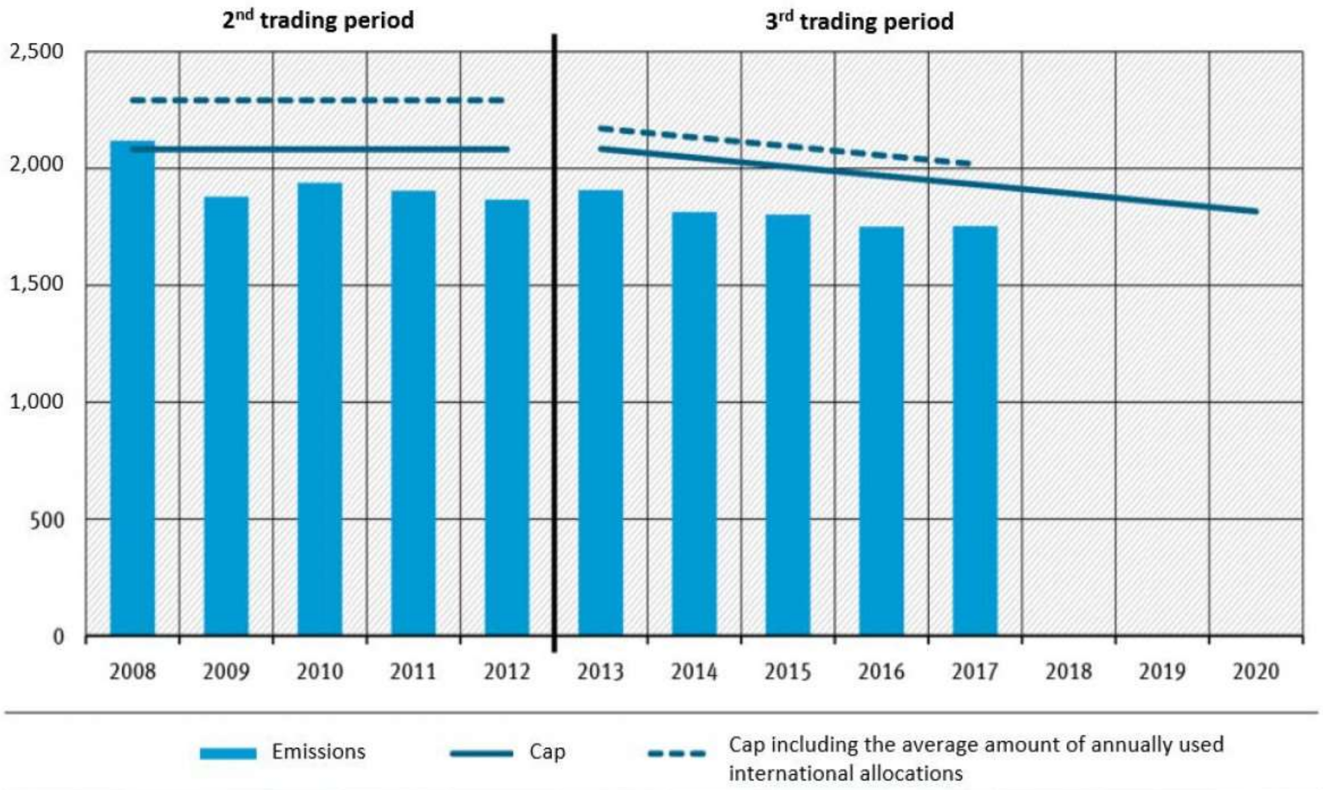
Cost difference EU ETS – Sectors at risk of carbon leakage



EU ETS trends (1)

Overall cap and emissions in the European emissions trading scheme

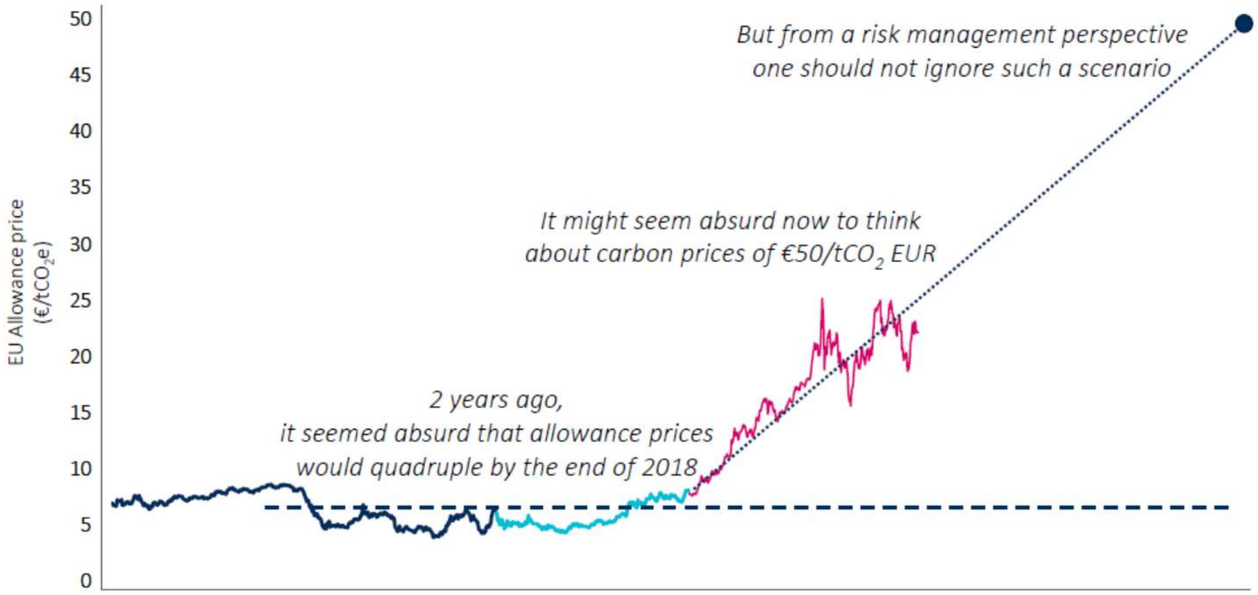
Million tonnes of CO_2 equivalents



Source: Umweltbundesamt 2018, DEHSt, calculations based on data from European Environment Agency and EU KOM (2013/448/EU)

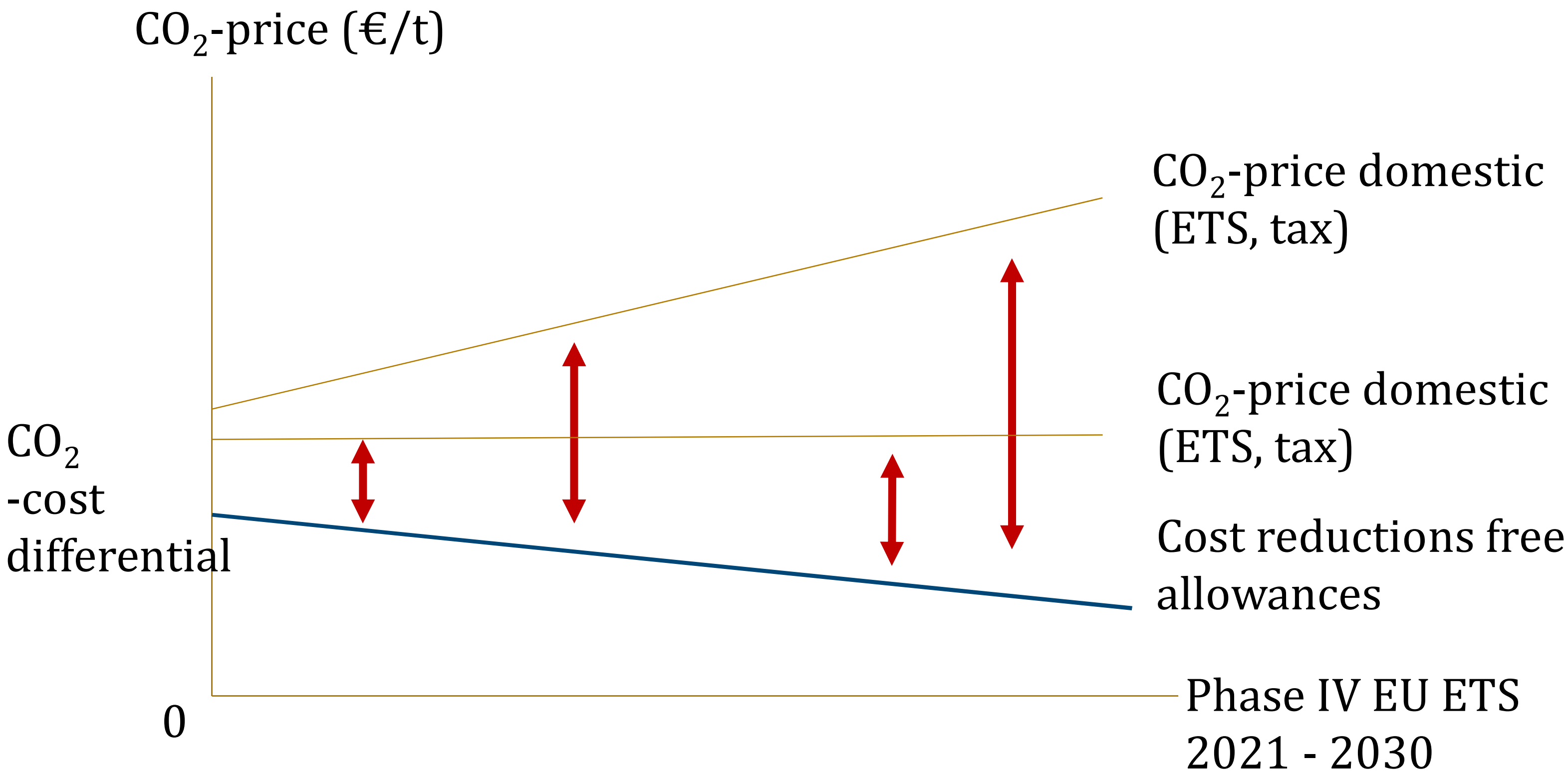
SWP

EU ETS trends (2)

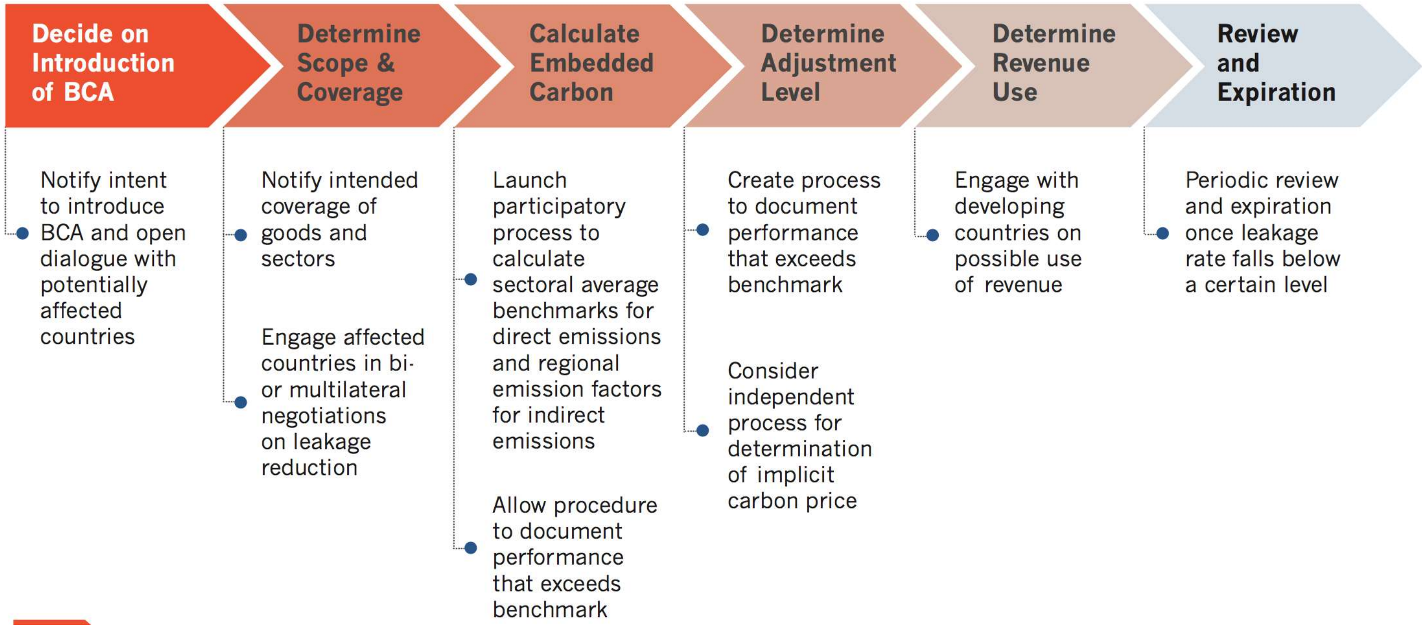


Source: vivid economics, Daten: ICAP

Expected cost difference EU ETS (2021 – 2030) for „sectors at risk“ - trends



Steps for introducing a BCA in the EU



BCAs – Limitations and Challenges

- BCA are **not** a silver bullet; could **complement** climate policy measures in the EU (or elsewhere) to avoid leakage of emissions from carbon pricing
- Companies will face different CO_2-cost in different markets also with a BCA in place.
- A **rebate** for exports is difficult from legal perspective (as are other subsidies under consideration)
- **Long-term incentives** for investors depend on capital rents/profits; low or no ambition by trade partner countries could still make a location more attractive than the country that imposes a BCA

SWP

References

- *Mehling, Michael; van Asselt, Harro; Das, Kasturi; Droege, Susanne 2019, What a Europaen ‚border carbon tax' might look like, VoxEU blog 10th December 2019* https://voxeu.org/users/mmehling
- *Mehling et al. 2019, What critics of a European ‚carbon border tax' are missing,* https://carbon-pulse.com/87966/
- *Mehling et al. 2019, Designing Border Carbon Adjustments for Enhanced Climate ActionVolume 113, Issue 3 July 2019 , pp. 433-481*
- *Climate Strategies Working Paper and Policy Paper:* https://climatestrategies.org/publication/designing-border-carbon-adjustments-for-enhanced-climate-action/

Vielen Dank!

Dr. Susanne Dröge

Senior Fellow
Global Issues

Tel. +49 30 88007-273
susanne.droege@swp-berlin.org
twitter.com/@droege_s

Stiftung Wissenschaft und Politik
Deutsches Institut für
Internationale Politik und Sicherheit
Ludwigkirchplatz 3 – 4, 10719 Berlin
www.swp-berlin.org