PART II: GLOBAL CLIMATE GOVERNANCE AND DIPLOMACY

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Abstract

This article assesses the distribution of power in international climate negotiations and beyond. Using the political science categories of *instrumental*, *structural* and *discursive* power, the article compares and contrasts the power of the central actors within the climate regime, in clean technology markets, in bilateral agreements, and at the interface of energy and climate governance. The multidimensional, relational quality of power, as well as the contrast between active and passive power, draw a differentiated picture of the behaviour of central Northern actors, i.e. the European Union (EU), Germany, Norway and the United States (US), and the emerging economies of the South, namely Brazil, China, India and South Africa. The article finds that China, in particular, is gaining power in the structural dimension, but is in a negative balance of power with the US in international climate negotiations. The EU and Germany have more ‘green power’ potential than they are actually using, while the least-developed countries primarily have some moral discursive power in negotiations only. Since this discursive power is not backed up by similar power potential in the other two dimensions, they currently cannot use it to their full advantage.

A. Global Climate Governance after Doha

In December 2012, international climate negotiations once again came close to failure. While the outcomes of this 18th Conference of the Parties (COP18) to the United Nations Framework Convention on Climate Change (UNFCCC) were rather limited, some of the primary goals of this round of

negotiations were actually attained: the closure of two negotiation tracks,¹ the agreement on a second commitment period of the Kyoto Protocol from 2013 to 2020, and some propulsion forward on a trajectory to a new agreement under the Durban Platform for Enhanced Action. Thus, COP18 counts as a ‘transitional’ or ‘housekeeping’ conference which kept the bureaucratic proceedings going, but it was devoid of any real progress.

Under the Durban Platform, a new binding agreement is supposed to come about by 2015. To what extent this new agreement will entail emission reduction targets for both industrialised countries and emerging economies depends on the interests and power relations among the central actors. These include the European Union (EU), the BASIC countries – Brazil, South Africa, India, China – and the United States of America (USA), but also other emerging economies such as Indonesia, Mexico and South Korea. In the light of this shift in relevant actor constellations, the question arises as to who actually has power in current global climate governance and what it looks like. This article offers some answers by analysing the power distribution, both within the international climate regime and beyond.

On the one hand, the decisions summarised as the Doha Climate Gateway and the proceedings of the Durban Platform kept international dialogue alive and, thus, averted a complete failure of the climate regime. On the other hand, many contested issues were simply adjourned, such as measurement and verification mechanisms, or they ended in very flexible wording. Moreover, the number of participants to the second commitment period under the Kyoto Protocol has diminished. Only the EU countries, Australia and, possibly, Belarus, Kazakhstan and Ukraine still take part. Given this perpetually slow progress, it is questionable whether such ever-increasing negotiations – in respect of the number of actors attending, their scope, and their complexity – still make sense. In addition, the decrease in global warming to a manageable level is becoming more unrealistic, at least as long as the international regime counts as the central forum for solutions.

Already, the active hubs of global climate governance are found at other levels, for example in the clean technology markets, transnational partnerships, or bilateral and national climate funds. Here, the emerging economies of the South play an increasingly important role as well. Their actions include both state and non-state actors. A complete analysis of the power distribution

1 The Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), and the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP).

in global climate governance, therefore, requires a differentiated view beyond the UNFCCC negotiations. Moreover, since climate governance is closely related to other fields such as energy or poverty reduction, the type and distribution of power may trigger spillover effects. If the power constellation changes in one field, it impacts other policy fields.

Against this background, the following assumptions form the starting points for the analysis:

- **Power is multidimensional:** *Instrumental* power enables an actor to directly influence or coerce others. *Structural* power means that an actor shapes the context and rules affecting others according to his/her own interests. *Discursive* power means that an actor can indirectly shape the identity, perceptions and preferences of other actors. These three faces of power² entail hard and soft resources that can be combined to form soft power strategies.³
- **Power is relational:** It always exists in relation to others and, thus, needs to be understood as a process in a particular context.
- **To have power does not mean using it:** Passive behaviour can have widespread consequences, especially regarding global public goods.

Section B that follows below analyses the power distribution within the climate regime, focusing on the international negotiations. Section C provides a complementary look beyond the regime. It compares and contrasts the power of central actors and new players in clean technology markets, the renewable energy arena, and in bilateral agreements. Section D introduces the concept of *green power* and provides an outlook on global climate governance and the relevance of green power for prospective change.

B. Power Distribution in the Climate Regime

In the climate regime, it is not only industrialised countries that are in a strong structural power position anymore: developing countries with significant greenhouse gas emissions have structural power of veto because a new climate treaty without their participation would hardly be effective. This group includes the BASIC countries, particularly China and India, but also other

2 Lukes (1974).

3 Nye (2010). According to Nye (ibid.), *soft power* entails the ability to attract and coopt, rather than coerce. Soft-power resources are the assets that produce such attraction.

emerging economies such as Indonesia, Iran, Mexico and South Korea. At the 'transitional' Doha Conference, bureaucratic processing rather than political acting was at the forefront, leaving underlying power distributions largely intact. Focusing particularly on emerging economies, the following provides an analysis of the structural, instrumental and discursive power distribution that characterises such international climate negotiations.

The structural power of Brazil and Indonesia in the climate regime differs somewhat from the others because of the large areas of rainforest they possess. In the past, the rainforest nations exerted instrumental power by successfully setting a financial compensation mechanism for forest conservation on the negotiation agenda, namely the United Nations Collaborative Programme for Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD). Costa Rica and Papua New Guinea have been particularly active in this regard.⁴ In Doha, Papua New Guinea pushed for the establishment of a REDD Committee, but the issue was postponed to the June 2013 negotiation round. Also postponed was the decision about the controversial REDD verification mechanisms, with Brazil and Norway having opposing ideas about what such mechanisms should entail.

The heavyweights Brazil and Indonesia still support REDD, but both are now active in other ways in case the climate regime fails. Both countries have set up national trust funds to which donor countries have already made substantial pledges. Ecuador and Guyana have followed suit. This limits the structural power of the rainforest coalition in the international negotiations, and presents a particular disadvantage to those countries which do not have the means to pursue their interests within and outside the regime at the same time. The Democratic Republic of the Congo, with its insufficient state structures, is such a case. Therefore, it is not possible to speak of a general rise of the South in the climate negotiations.⁵

Moreover, the BASIC countries are not as uniform a group as they may seem at first. Indeed, they do not constitute a stable block of power in the climate regime *per se*.⁶ BASIC exerted some direct instrumental power at the Copenhagen negotiations in 2009 when they managed to get their way against the EU and shape the Copenhagen Accord largely according to their own interests. Since then, however, differences in the relational quality of

4 Lederer (2012).

5 (ibid.).

6 Hallding et al. (2011).

power are becoming more apparent not only among the BASIC countries, but also between them and their respective regions. In addition, their power is limited by the structural and instrumental power of the industrialised countries and the moral discursive power of the least-developed countries (LDCs) and the Alliance of Small Island States (AOSIS). The LDCs and AOSIS will be hit hardest by the impacts of climate change, but have not caused it. They also do not accelerate climate change with their current emissions, as the BASIC countries do. Some of the members of AOSIS such as the Maldives are even threatened in their territorial existence. While this has led to a sense of responsibility and financial support by some industrialised countries, the framing of international equity has not yet turned into substantial financial commitment by all such countries. In Doha, only Denmark, the EU and Sweden announced concrete financial pledges up to 2015.

Brazil and South Africa are generally more open to binding mitigation targets than India and China. However, each of these four countries only commits to those voluntary emission reductions that they can reach with minimal extra effort according to the calculations of their own experts. Brazilian and South African experts favour a burden-sharing approach, while China and India base their calculations on a global carbon budget. The latter has been proposed in a similar form by the German Advisory Council on Global Change.⁷ Within these four countries' similar approaches, there are of course differences.⁸ Owing to these internal discrepancies, the BASIC countries are missing out on the possibility of strengthening their power position as a group.

In relation to India, China has more active discursive power, even though it did not use it in Doha. Right at the beginning of the Durban negotiations in 2011, the Chinese government envisioned participation in a post-2020 climate treaty as long as the principle of common but differentiated responsibility and a second commitment period in respect of the Kyoto Protocol would be honoured. At first, India did not want to participate in a new treaty at all and, thus, stood apart. The cautiously progressive steps India had taken before largely depended on the previous Minister of Environment, Jairam Ramesh;⁹ their apprehension seems to have been justified with the fall-back of the Indian delegation into blocking mode after Ramesh's dismissal in July

7 Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen (WBGU).

8 Winkler et al. (2011).

9 Michaelowa & Michaelowa (2011).

2011. In contrast to the other three BASIC countries, India's power derives less from active shaping and influencing than from blocking. The only exception is India's active engagement for the setting up of a centre for clean technology transfer because such transfer is clearly in India's interest. Similar to China and South Africa the domestic coal and oil industry has a veto power that should not be underestimated in its influence on governmental decision-making.¹⁰ Sometimes representatives of these corporations even take part in the international negotiations as observers or consultants for the delegations, e.g. the South African coal-to-liquid giant, Sasol.

Nonetheless, the chance is rather low that India will be successful by continuing to insist on equity and by strengthening its instrumental and structural power position with new partners in this way. Even together with the LDCs, the establishment of a discourse on climate justice has not been successful in that it has not influenced the shaping of the climate regime in a decisive way.¹¹

China and the US are in a negative balance of power. Neither will take a decisive step forward in the climate negotiations without the other doing the same. Both countries are in an extremely strong power position, which they could use in many ways to shape the prospective climate regime. However, they do not use this potential for domestic political and economic reasons. For example, the chance of passing any kind of federal climate-related policy through the US Congress are currently minimal, even though various climate governance actions are being taken at state and local levels.¹² In addition, the balance of power between the US and China in international negotiations impedes political moves forward in the short term.

Only the EU has some instrumental power – which it used more actively in Durban in 2011 than in Doha in 2012. The EU achieved their negotiation goals in Durban by gaining consensus on a road map for a new climate treaty as well as a second commitment period under the Kyoto Protocol. The most prominent display of its instrumental power was the huddle with India on the last day of negotiations, in which the EU emerged as the winner. Thus, the EU managed to make up on its loss of power at the Copenhagen negotiations in 2009 and the simultaneous loss of its leadership role, at least to some extent. Since Durban, increasing internal discord among EU member countries – particularly Poland's defensive stance – have been weakening

10 Never (2012).

11 Roberts (2011).

12 Schreurs (2012:10).

the region's general power position. In Doha, the EU achieved its goal of ensuring the second commitment period to the Kyoto Protocol was ready for ratification, but it did not opt for the unilateral move towards raising its emission reduction targets. Moreover, the EU slightly increased its attraction through soft power to developing countries, being one of the few negotiating parties that continued so-called fast-start finance beyond 2013. In Doha, the EU confirmed new financial pledges in spite of the European economic crisis. However, neither the EU nor Germany uses its full power potential because both still do not apply pressure to their traditional transatlantic allies, Canada and the US. The EU's quest for leadership in the climate regime is, therefore, overshadowed by greater diplomatic-strategic alliances.

The exit of Canada, Japan, New Zealand and Russia – and, possibly, Belarus, Kazakhstan and Ukraine – from the Kyoto Protocol has two sides to it. On the one hand, the Protocol has been saved from complete failure by this exit: it could be counted as the direct successful application of instrumental power by Protocol supporters. On the other hand, the exit is negative with respect to managing climate change owing to the high emissions and structural power of the exiting parties. At Doha in 2012, power and interest struggles turned fierce when it came to the transfer of any surplus emission rights from the first Protocol period to the second, and/or the possibility of selling such rights without participating in the second period. Finally, a compromise emerged: only those countries participating in the second period could transfer or sell their surplus rights; Poland is among these. While this reflects a slight gain in instrumental power for beneficiaries such as Poland, it is a power loss for Russia. At the time of writing, it is unclear whether Belarus, Kazakhstan and the Ukraine will exit the Protocol as well. AOSIS managed to insert a paragraph in the final Doha Decision text that sets a cap on the emissions of the latter three countries at 2008–2010 levels during the second Protocol commitment period.¹³ If these three countries continue to take part, it would signify a direct instrumental power gain by AOSIS. If the three withdraw, nothing positive will have been achieved: neither for AOSIS, nor for the management of global warming. In any case, the climate regime is further weakened by the numerous withdrawals from the Protocol.

South Africa is another interesting case in terms of the relational quality of power. The country is torn between the interests of the BASIC countries, legitimating itself as a representative of sub-Saharan Africa, and the demand

13 Allan & Kruppa (2012).

to be a reliable partner for the North.¹⁴ In relation to the other BASIC countries, South Africa's power is on a smaller scale; but in relation to the southern African region, its power is greater. The latter primarily concerns the discursive dimension: South Africa was able to foster transparency in the negotiations and to increase the participation of LDCs and civil society in the Durban negotiation round in 2011. But the capacity to produce a feel-good effect through indabas will not limit global warming. Moreover, taking this bridging function between industrialised and developing countries is becoming harder for South Africa.

There is a new framing or even an informal norm under way as the LDCs and AOSIS increase the pressure on the emerging economies to do their share as well. Indeed, the break-up of the formerly united G77 became very obvious in Doha. While the LDC and AOSIS groups remain, a new Association of Independent Latin American and Caribbean states (AILAC), comprising Chile, Colombia, Costa Rica, Guatemala, Panama and Peru, was formed in the 2012 mid-year negotiations in Bonn. AILAC calls for the mitigation of emissions by industrialised and developing countries as well as an incentive system for all countries to do so. Opposing AILAC is the new group of 'Like-minded Countries', comprising members of the Arab Group, Argentina, Bolivia, Ecuador and Venezuela, as well as India and China. They continue to advocate for international equity and the historical responsibility of the industrialised countries.¹⁵ These alliances have started to shift the relational power between negotiating parties. However, no gain in power for any negotiating party can be expected in the immediate future that would change the general stand-off.

C. All Power to the Market?

The practice of climate governance happens outside the international negotiations. At the state level, the direct, instrumental power relations can be explained by using the example of climate funds. Because of their financial resources, the donor countries Australia, Norway and Sweden, which have pledged to developing countries' national funds, but also Germany, Japan and the United Kingdom (UK), which have pledged via their own funds or

14 Atteridge (2010).

15 IISD (2012).

through emissions trading, were initially in a strong position in the bilateral and multilateral negotiations. But the structural and moral discursive resources of the receiving countries, such as Brazil, Ecuador, Indonesia and Tanzania, have a countering effect. This has led to a balancing of interests.¹⁶

Norway, in particular, benefits from its active leading role. It has generated a positive attraction in the sense of soft power. Norway is the driving force behind the new Energy+ Partnership, which includes Denmark, France, the Netherlands, South Korea, Switzerland and the UK. These donor countries give energy-related help to countries such as Bhutan, Ethiopia, Kenya, Liberia, the Maldives, Morocco, Nepal, Senegal and Tanzania.¹⁷ Thus far, the latter group of countries has only benefitted marginally from the Clean Development Mechanism (CDM). In Indonesia, however, the soft power benefits are currently somewhat at risk for Norway. Already in 2010, the Norwegian government promised up to US\$1 billion for the development and implementation of REDD projects in Indonesia, but progress on these projects has been slow. The Indonesian government struggles with the implementation of a forest logging moratorium, and Norway has been discovered to own a small share in a palm oil company that is involved in illegal logging.¹⁸ If the bilateral deal is successful in the end, both Indonesia and Norway will come out more powerful.

The instrumental power of private CDM project developers and consulting firms from Brazil, China and India is increasing in the carbon markets. This is both visible in relation to European companies and as an influential voice to their own governments, which the local CDM industry is pushing towards sustaining emission trading in the international climate negotiations. Since the Kyoto Protocol is the only legally binding instrument under the UNFCCC and the CDM is a means for technology transfer, developing countries and emerging economies have always supported it.

Power struggles to date only happen along the North–South axis. In 2011, the introduction of an aviation carbon tax demonstrated the EU's instrumental power. This led not only to considerable protest from Chinese and Indian airlines, but also to a controversy with the US. US airlines even filed a complaint, which was, however, dismissed in December 2011. If the EU had continued along these lines of imposing taxes unilaterally, its role as a

16 Lederer (2012).

17 Reuters (2012).

18 Sukma Sawitri (2012).

leader would have been significantly strengthened again. However, facing this strong resistance, the EU actually revoked its decision in the run-up to Doha in order to keep the door open to international solutions. The EU expects future regulations to be imposed by the International Civil Aviation Organization or an international agreement within the climate regime.¹⁹ If neither of these solutions comes about in the near future, the EU may revert to its unilateral move

Structural power shifts that involve private actors are particularly evident at the interface of climate and energy policy. Here, general market developments in renewable energy and energy efficiency and the technological power of individual multinational corporations are prominent. Technological power is a form of structural power which is mostly exercised by private actors. Corporations have technological power if they have privileged access to technical information and if they can steer innovation processes through their superior expertise and material resources.²⁰ With regard to carbon capture and storage, current technological power is in the hands of the European (e.g. BP and Statoil) and US (e.g. Exxon Mobil) oil and gas industry.²¹ Here, the power of neither the EU nor the US is in decline.

If we look at the whole sector of renewable energy, the South is catching up quickly, as new public and private investments make clear (Figure 1).

Figure 1: New Financial Investments in Renewable Energy: Industrialised v Developing (including BASIC) Countries, 2004–2010

Source: Bloomberg New Energy Finance & UNEP (2011)

¹⁹ Kohn (2012).

²⁰ Falkner (2005:105–134).

²¹ Tjernshaugen (2012).

The respective power of the coal and oil industries does not hinder these new investments in renewable energy because the diversification of energy sources is both an economic and climate-change-related necessity. The increase in electricity supply shortages in recent years, especially from 2008 onwards in India or South Africa, for example, makes a clear case for adding alternative energy sources to fossil fuels. The need to balance development needs with the required switch to a low-carbon path makes a quick *Energiewende*²² to renewables following the German example unlikely in the near future.

In 2010, China has been leading global investments in clean technology with US\$50 billion, followed by Germany and the US. The majority of German investments went into small scale projects such as solar roofing. Egypt, Kenya, Mexico and Pakistan also invested more than US\$1 billion. India saw the strongest growth of investments (52%) in 2011, compared to the previous year. The first financial commitments under the national solar mission, which is part of the Indian domestic climate-related policy, accounted for the majority of US\$10.3 billion.

The investments underline the current dynamics in the renewable energy market and the potential companies ascribe to it. Even though the switch to renewables will continue to be difficult for the BASIC countries – apart from hydropowered Brazil – current developments give reason for some hope. With the right combination of incentives, regulation and control, even China and India could surpass their self-set goals for renewable energy, energy efficiency and the carbon intensity of the economy.

Several Chinese and Indian companies belong to the Top 10 in the global solar and wind energy market (Figure 2). Together, Chinese companies have a 30% share of the global market for wind turbine producers. Moreover, China has the highest installed wind capacity in the world with 63 MW, followed by the US, Germany, Spain and India in order of MW installed.²³

22 Best translated as “energy revolution”.

23 World Wind Energy Association (2012).

Figure 2: Shares of the Top 10 Wind Turbine Producers in the Global Market in 2010 (%)

Source: REN21 (2011)

Among the Top 15 global producers of photovoltaic (PV) cells 7 are Chinese corporations. Increasingly, European and US PV producers are suffering from the Chinese competition, which already produces 55% of PV cells globally. The US, therefore, started to impose import tariffs for Chinese solar cells on a low level. Following a lawsuit by European solar firms – among them the German producer Solarworld – the European Commission initiated an anti-dumping measure against Chinese producers in September 2012. Chances for success remain questionable since many German firms are closely associated with China through supply and value chains.

Therefore, China's structural power – and to a lesser extent that of India – is increasing strongly in the wind and solar markets. Working against it is Europe's structural power, especially Germany's. Germany still has the largest market for renewable energy as well as the most installed capacity and transmission lines. The US is in a similar situation. Several European countries, including Germany, have reacted to the current surplus capacities of the solar market by cutting government subsidies. From a global climate political viewpoint, this makes sense because reasonable market and price

developments are necessary to support as many countries as possible in their switch to renewable energy sources. However, this can only happen if China also cuts its subsidies and, therefore, allows for a completely free market. Up to now, Beijing has only taken a few small steps in this direction: in 2012, for example, the government cut the subsidies for solar pilot projects by only 21%, following declining component prices.²⁴ From now until 2015, the government also plans to reduce the solar industry's reliance on exports, and to lend strong support to developing a domestic market. Currently, 90% of Chinese PV cells are exported.²⁵

In the short term, the shift of the global renewable energy market would result in a loss of structural power in climate governance for Germany in particular, and for Europe in general. In the long run, it could pay off to reduce the number of German companies to those with a substantial technological advantage. By now, the quality of Chinese PV cells is comparable to its German counterparts. If the technological power of German companies in renewable energy and energy efficiency were to be strengthened, Germany's structural power in global climate governance would be secured. To achieve this, more investments in research and development and a systematic use of green innovation potentials are required. Overall, Europe, Germany, and the US still invest a lot more in research and development than the emerging economies of the South. However, the solar industry has been neglected in this regard.

For those developing countries that are already participating in clean technology markets, the structural power and the economic dominance of Asian, European and US companies is too strong to play a significant role in the markets themselves. Even though investments are partly increasing and more renewable energy and energy efficiency projects exist, developing countries have not yet been able to influence this area of global climate governance. Owing to their lower level of development, many of these countries face other issues and have other priorities such as the extension of electricity transmission lines and the electrification of all households. Pioneers like Costa Rica, which plans to be the first carbon-neutral country in Latin America, are at a structural disadvantage because of the relational quality of power. Costa Rica is able to use its pioneering role more within the discursive dimensions in the international climate negotiations – together

24 Shen (2012).

25 Juan (2012).

with the LDCs – to apply moral pressure to the industrialised and the BASIC countries.

D. The Future of Green Power

In a simplified version, *green power* as a complement to a *green economy* would require a combination of instrumental, structural and discursive elements with a positive orientation towards the global public good *climate*. Currently, none of the central actors possesses this green power in all of these dimensions. Instead, global climate governance at present consists of a polycentric system in which different actors are active with different means and ends. Some authors even call the global climate governance system *fragmented*.²⁶

In its complete version, the concept of *green power* as developed by this author²⁷ not only includes the three relational power dimensions mentioned thus far herein, but also makes the connections to innovation an important factor for the transformation towards a sustainable, greener economy. The concept of *green power* additionally includes the share of global commons a country possesses (forests, biodiversity, marine life, etc.), its technological capabilities, its absorptive capacity for innovation, its integration into global green value chains, and its ability for ‘smart governance’. *Smart governance* means the ability to coordinate and implement energy innovation and environmental governance in a way that goals do not contradict each other or lead to unintended negative effects in one of the issue areas. While it would go beyond the scope of this article to apply this concept to the research questions posed here, as stated earlier, none of the central actors discussed possesses active green power in all these dimensions. In general, the industrialised countries still have and could exert more green power, but Brazil, China and India – and even Costa Rica – are catching up in some areas.²⁸

The differentiation between *active* and *passive* green power is particularly relevant in the current polycentric system. As we have seen in this article, a country may behave passively in international negotiations, but may actively build and exert its green power at other levels and through other channels.

26 Biermann & Pattberg (2008); Van Asselt & Zelli (2012).

27 Never (2013).

28 (ibid.).

In spite of the current polycentric system in global climate governance, the continuation of the international negotiations makes sense for three reasons:

- The participation of LDCs in global climate governance and their access to resources for the adaptation to climate change is ensured
- Governments can represent their positions and enter into those power struggles that matter to a domestic audience, particularly in a discursive, symbolic way. Simultaneously, this opens up more space for action at other levels, and
- The topic of climate change remains on the political agenda and in the public consciousness. The shift of decision to smaller actor circles or clubs like the G20 is only useful in respect of emission reductions: all other areas require a global participatory approach for climate justice reasons.

China's power is generally increasing in the structural dimension, but the country does not use its instrumental or discursive power in the negotiations to establish a global leadership position. Instead, it stands in a balance of power with the US. India is the poster child for the power of the veto: the country has not been that successful in the discursive dimension, but it is increasing its power in the structural dimension outside the climate regime. Europe has again increased its power in international negotiations, and has started positioning itself against its ally the US on other climate governance levels. In principle, Europe and Germany have the potential to become green powers but they are too hesitant to do so because of other, conflicting foreign policy objectives and domestic interest struggles – besides being restricted by China's structural power gain. Germany still possessed structural power, particularly in respect of renewable energy. Its structural power is increasingly being met by China and India.

References

- Allan, Andrew & Martin Kruppa, 2012, Belarus Negotiator Hints at Kyoto Exit, Says Others Could Follow, *Reuters*, 10 December, available at <http://www.reuters.com/article/2012/12/10/us-climate-talks-kyoto-idUSBRE8B90ZY20121210>, last accessed 10 December 2012.
- Atteridge, Aaron, 2010, Multiple Identities: Behind South Africa's Approach to Climate Diplomacy, SEI Policy Brief, Stockholm, Stockholm Environment Institute.

- Biermann, Frank & Philipp Pattberg, 2008, Global Environmental Governance: Taking Stock, Moving Forward, *Annual Review: Environmental Resources* 33, 277–294.
- Bloomberg New Energy Finance and UNEP/United Nations Environment Programme, 2011, *Global Trends in Renewable Energy Investment 2011*, Nairobi, UNEP.
- Falkner, Robert, 2005, The Business of Ozone Layer Protection, in: Levy, David & Peter Newell, *The Business of Environmental Governance*, Cambridge, MIT Press, 105–134.
- Hallding, Karl, Marie Olsson, Aaron Atteridge, Antto Vihma, Marcus Carson & Mikael Román, 2011, *Together Alone: BASIC Countries and the Climate Change Conundrum*, Copenhagen, Nordic Council of Ministers.
- IISD/International Institute for Sustainable Development, 2012, *Earth Negotiations Bulletin*, Winnipeg, IISD Reporting Services.
- Juan, Du, 2012, China's Domestic Solar Market to Expand, *China Daily*, 25 February 2012, available at www.chinadaily.com.cn/business/2012-02/25/content_14691414.htm, last accessed 25 February 2012.
- Kohn, Andreas, 2012, Country Positions: The EU, UN Weltklimakonferenz: Future Camp Blog, 30 November, available at http://future-camp.de/news/story/352/view/?locale=de_DE, last accessed 30 November 2012.
- Lederer, Markus, 2012, Die Macht des Südens in der globalen Klimapolitik, Unpublished Paper Presented at the Conference on *Politik und Ökonomie in globaler Perspektive: Der (Wieder)Aufstieg des globalen Südens*, held at Goethe University, Frankfurt am Main, 5–7 March 2012.
- Lukes, Steven, 1974, *Power: A Radical View*, London, Macmillan.
- Michaelowa, Katharina & Axel Michaelowa, 2011, India in the International Climate Negotiations: From Traditional Nay-sayer to Dynamic Broker, Working Paper No. 70, Zürich, Centre for Comparative and International Studies.
- Never, Babette, 2012, Who Drives Change? Comparing the Evolution of Domestic Climate Governance in India and South Africa, *Journal of Environment and Development* 21 (3), 362–387.
- Never, Babette, [Forthcoming], Towards the Green Economy: Assessing Countries' Green Power, GIGA Working Paper, Hamburg, German Institute of Global and Area Studies.
- Nye, Joseph S., 2010, The Future of American Power, *Foreign Affairs* 89 (6), 2–12.
- REN21/Renewable Energy Policy Network for the 21st Century, 2011, *Renewables 2011: Global Status Report*, Paris, REN21 Secretariat.
- Reuters, Norway Pledges \$300 Million to Green World's Power, available at www.reuters.com/article/2012/01/18/us-norway-carbon-idUSTRE80H1LT20120118, last accessed 18 January 2012.
- Roberts, Timmons J., 2011, Multipolarity and the New World (Dis)Order: US Hegemonic Decline and the Fragmentation of the Global Climate Regime, *Global Environmental Change* 21 (3), 776–784.
- Sawitri, Adisti Sukma, 2012, Indonesia's REDD Reality, *The Jakarta Post*, 3 June, available at <http://www.thejakartapost.com/news/2012/06/03/indonesia-s-redd-reality.html>, last accessed 12 December 2012.

- Schreurs, Miranda, 2012, Breaking the Impasse in the International Climate Negotiations: The Potential of Green Technologies, *Energy Policy* 48, 5–12.
- Shen, Feifei, 2012, China Reduces Solar Subsidy on Declining Costs of Components, available at www.bloomberg.com/news/2012-05-03/china-cuts-subsidies-for-solar-projects-21-on-declining-costs.html, last accessed 7 September 2012.
- Tjernshaugen, Andreas, 2012, Technological Power as a Strategic Dilemma: CO₂ Capture and Storage in the International Oil and Gas Industry, *Global Environmental Politics* 12 (1), 8–29.
- van Asselt, Harro & Fariborz Zelli, 2012, Connect the Dots: Managing the Fragmentation of Global Climate Governance, Earth System Governance Working Paper 25, Lund/Amsterdam, Earth System Governance Project.
- Winkler, Harald, T. Jayaraman, Jiahua Pan, Adriano Santhiago de Oliveira, Yongsheng Zhang, Girish Sant, Jose Domingos Gonzalez Miguez, Thapelo Letete, Andrew Marquard & Stefan Raubenheimer, 2011, *Equitable Access to Sustainable Development: Contribution to the Scientific Body of Knowledge*, Beijing/Brasilia/Cape Town/Mumbai, BASIC Experts Group, available at http://www.erc.uct.ac.za/Basic_Experts_Paper.pdf, last accessed 6 May 2013.
- World Wind Energy Association, 2012, World Market Recovers and Sets New Record, 7 February, available at www.wwindea.org/, last accessed 12 February 2012.