Agency dynamics of International Environmental Agreements: actors, contexts, and drivers

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Abstract
The structural elements of global environmental governance are notoriously difficult to change and align with the needs of a rapidly deteriorating earth system. This, however, only increases the need to focus on the role of agency in this context. This paper does so by taking stock of what we know about agency in relation to International Environmental Agreements (IEAs) and suggests directions for future research. We contribute a conceptual framework to enable the mapping of research on agency related to IEAs and advance more systematic study of agency in this context. The framework differentiates between the negotiation of IEAs, their implementation and outcomes, and includes agency-related and context-related drivers of agency in these processes. We subsequently review articles published between 2003 and 2020 in the journal International Environmental Agreements (as one of the few journals exclusively focusing on IEAs) dealing with actors’ agency and analyse how these articles address agency in the context of IEAs. We conclude firstly by identifying avenues for how further research can fill important gaps, including a need for increased transparency on the methods and theories used in articles, and more comparative research particularly on agency dynamics in implementation; and secondly by highlighting important pointers for policy-makers including the need to re-evaluate the role of national sovereignty and address the forces that counteract equality and justice. Key lessons include the need to improve global south countries’ capacity to influence IEA negotiations (input legitimacy), the central role of public and peer pressure on countries to implement commitments, the impact of multilevel governance dynamics and the importance of ensuring that IEAs benefit local communities (output legitimacy).

Keywords Agency · International Environmental Agreements · Negotiation · Implementation · Outcomes

Abbreviations
APP Asia-Pacific Partnership on Clean Development and Climate
ASEAN Association of Southeast Asian Nations
CBD Convention on biological diversity
CDM Clean development mechanism

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June 2022 marks 50 years since the governments of the world came together in Stockholm for the United Nations Conference on the Human Environment (UNCHE) for the first comprehensive meeting to take stock of the worsening state of the environment and to develop governance approaches that address environmental degradation and embark on more environmentally friendly pathways towards human development. The 1972 conference spurred decades of agency in negotiating international rules and laws in the form of International Environmental Agreements (IEAs) as well as non-legal norms addressing many of the urgent transboundary environmental issues accompanied by the development of an extended yet fragmented international bureaucracy tasked, albeit with very weak mandates and resources, to administer these agreements and support their implementation in countries. The adopted international norms span much of the legalisation continuum from hard to soft law, from legally binding treaties (i.e., IEAs) with specific obligations to non-legal recommendations (soft law) for goals to achieve such as the Sustainable Development Goals (SDGs) (Gupta & Vegelin, 2016).

However, despite this impressive manifestation of agency in negotiating and adopting international agreements aimed at addressing key environmental and sustainability challenges, agency in translating these agreements into national laws and policies is considerably weaker (Betsill et al., 2020). The continuously deteriorating trends across several
environmental domains is a constant reminder of the insufficient outcomes these agreements have led to and drive the urgency to change this unbalanced agency dynamic.

Many see this situation as the failure of the UN-based multilateral process of law-making initiated by the UNCHE. A more sober analysis of the underlying structure of the world order into which these IEAs were born, however, must conclude that whatever promises they provided—they were strongly conditioned by the willingness and ability of sovereign states to honour their commitments, keeping their word and thus be trustworthy. Whatever expectations we have of the rule of law in domestic contexts to be effective in eliciting compliance (and providing sanctions when that is not the case), international hard laws, and much more so soft law are seldom accompanied by international accountability mechanisms that can issue formal sanctions (Groff & Karlsson-Vinkhuyzen, 2018). The analysis of agency dynamics of IEA implementation is therefore as relevant in domestic as in international contexts. Moreover, the major drivers for states to engage in and design IEAs in particular ways also come from the domestic context, thus making a two-level/multilevel focus in the analysis of the agency of IEAs highly relevant (Rietig, 2021).

The environmental governance research community has been assessing agency and several questions arising from the limited effectiveness of IEAs to address urgent environmental changes. In this article, we focus on agency in relation to IEAs as we consider more effective and legitimate agency to be one of the most important avenues for change. Understanding agency in relation to IEAs is a first step. Agency can be defined as the dynamic and fluctuating capacity of actors to “act in the face of earth system transformation or to produce effects that ultimately shape natural processes” either to solve problems or to cause problems (Dellas et al., 2011, 89). Agency is multi-layered, interlinked, shared, contested and exercised by a range of actors (Biermann & Siebenhüner, 2009; Scobie, Benny et al., 2020; Scobie, Betsill et al., 2020). Furthermore, there is a lively debate on the nature, identity, exercise, and evaluation of agency in the environmental governance literature (Betsill et al., 2020).

The 50-year anniversary of increasing environmental awareness and global environmental governance coincides with the 20th anniversary of International Environmental Agreements (INEA), the flagship journal on the negotiation, implementation, and outcomes of international agreements with environmental relevance. These two milestones provide the starting points for our article.

The aims of this paper are threefold. Firstly, it is to systematically map and analyse the accumulated knowledge on agency in relation to IEAs. Secondly, it is to suggest directions of research in this field with particular emphasis on how the journal of INEA can stimulate such contributions. The third and final aim is to reflect on the policy implications of research on agency in relation to IEAs. The central research question is how have agency dynamics played out either in the making of IEAs along the soft-hard law continuum and/or their implementation and an assessment of effectiveness?

Our analysis enables answering additional questions such as who the main agents (analysed) are, at which governance level agency is analysed, which empirical domains dominate the analysis of IEAs, and which methods and theoretical frameworks have been used. In parallel, we can answer questions on who the missing actors are, as well as which are the missing regimes, methods, and theoretical perspectives. While the review is focused on articles published in INEA, the analysis is anchored in the broader theoretical perspectives of the structure-agency debate, particularly in the International Relations (Braun et al., 2019) and Global Environmental Governance (Betsill et al., 2020) literatures.

With this review article on agency around IEAs, we respond to the gaps identified by preceding recent initiatives, most notably the Earth System Governance 'harvesting'
project on agency (Betsill et al., 2020). This harvesting project analysed over 400 books, articles and book chapters published by Earth System Governance scholars between 2008 and 2016 relating to, and in most cases empirically examining, agency. However, the authors of that exercise concluded that gaps remain in the ESG literature on theoretical and conceptual work on how actors become agents and how their authority is exercised and restricted (Gerlak et al., 2020, 189). This gap persists despite earlier calls for improving reflection on and development of theoretical approaches on agency (e.g. see Kelly & Adger, 2000).

The paper proceeds as follows. In the next section, we define the key concepts and provide the analytical framework we developed. Then, we describe the methodology and present the findings of the review in sections four and five, respectively. We discuss our findings and how they contribute to existing agency research and the prevailing multi-level governance context in Sect. 6. Finally, we conclude by proposing how to strengthen INEA’s contribution to research on agency in relation to IEAs and giving some pointers for those with both agency and drive to improve the negotiation, implementation and ultimate outcome of international hard and soft law for the environment. The latter we do particularly in relation to the moment of reflection on the effectiveness and legitimacy of global environmental governance that Stockholm+50 held in June 2022 provides.

2 Analytical framework

One central finding of earlier reviews of agency in environmental governance has been the lack of conceptual and analytical frameworks that would allow the study of agency in a more structured and comparative way (Betsill et al., 2020). This section presents such a parsimonious analytical framework, which subsequently informs our review of agency research related to IEAs within INEA. The analytical framework was developed based on the authors’ expertise and reflections on the broader relevant literature on agency in environmental governance.

Agency linked to IEAs comprises various actors who, operating in a multilevel governance context, shape and are involved in negotiating and implementing IEAs. The multilevel context can span the global/international level, in some cases regional levels such as the European Union, the African Union or the Caribbean Community, the national level, and sub-national levels as well as interactions between those levels through transnational networks, for example. We approach agency dynamics as fluid and interdependent, created by the involvement of a range of key actors including governments, international organisations and non-state actors including cities, civil society, businesses, and academics working through transnational networks, intergovernmental organisations and arenas (Bäckstrand et al., 2017; Chan et al., 2019). We differentiate between three major aspects of agency dynamics of IEAs as shown in Fig. 1:

1. Dynamics related to the negotiation of IEAs. Here, states (national governments) are dominant actors, the only ones with formal decision-making power (Yamin & Depledge, 2004). Agency-related drivers for states to engage in developing international agreements vary and can span from short-term material self-interest to altruistic concern for doing what is right for humanity and the planet (Del Pilar Bueno Rubial & Siegele, 2020). While states are the only actors with formal decision-making power in the nego-
tations, non-state actors get involved and influence the process and outcome of the negotiations in both domestic and international settings (Chan et al., 2019).

2. Dynamics related to the implementation of IEAs. The implementation phase occurs over a longer time frame and is influenced by national as well as sub-national dynamics including local politics and political will, competing interests of central national actors, non-state actors, national/sub-national capacities, and available resources (Brandt & Svendsen, 2004; Houle et al., 2015).

3. The outcome of IEAs. Certain outcomes emerge depending on the drivers that influence the negotiation and implementation phases. Outcomes are understood here as changes in the status quo, in the behaviour of relevant actors and/or the condition of the environmental dimension in question. The outcomes may have a level of output legitimacy in the eyes of various actors with relevant agency, based on, e.g., the effectiveness in addressing the environmental problem that gave rise to the IEA (Fuentes-George, 2013; Tveit, 2018) and the equity impacts. This degree of output legitimacy can improve implementation, making positive reinforcement possible through higher buy-in from the relevant actors (Bäckstrand et al., 2017).

We distinguish two major types of factors that drive actors’ agency in relation to IEAs; those related to the key actors themselves (such as interest, capacity) and those related to the context (such as available technology). The line between these two types of factors is dynamic, for example, new technology can enable the government to change its capacity for more ambitious action. However, we see the agency-related drivers as being more in control of the agents themselves compared to context-related factors.
Agency-related drivers for strong/ambitious IEAs may emerge from a dissatisfaction with the status quo, from information, or emotions (Selin, 2014) influencing perceived interest. Such factors influence decisions to use available resources to address the (environmental) problem at hand. Scientific evidence on the devastating state of the environment, as well as the causes and impacts of environmental degradation, is one type of information that can evoke dissatisfaction with the status quo (Campbell et al., 2014). As these impacts get linked to individuals’ and societies’ values and interests, they become agency-related drivers. Scientific evidence of environmental degradation, climate change, and impacts on human health (IPCC, 2021), pictures, and narrations of negative environmental impacts and the vulnerability of Earth’s natural balance can be powerful means to evoke emotions that drive agency. Historic examples that motivated the early environmental movements of the 1970s and 1980s include the ‘blue marble’ picture by NASA showing Earthrise over the Moon (NASA, 2018), Rachel Carson’s Silent Spring on the impact of chemicals and environmental pollution (Carson, 1962) as well as the pictures and reports on the devastation caused by hurricanes, floods, and droughts that motivate the Fridays for Future and other climate movements (Martiskainen et al., 2020).

These agency-related drivers can find expression in the adoption and implementation of IEAs but there are also many agency-related drivers that may push agency in the other direction. Among these are the actions of those who stand to lose from international cooperation and possess indirect influence over political decision-making on joining or implementing IEAs. These include lobbying by powerful economic interests of small, medium-sized, and especially multinational corporations whose business model is built on letting society bear the financial and non-financial costs of environmental externalities/pollution and their employees who stand to lose their jobs due to outsourcing or changes in business models (Hermwille & Sanderink, 2019). Further examples of such drivers are the motivations and resulting activities of citizens who are concerned about the financial impacts of rising fuel prices because of carbon pricing and the inconvenience of behavioural changes required to their lifestyles because of implementing international obligations (Martin & Islar, 2021).

Agency-related drivers can operate at both the domestic and international levels, such as for example the political and civil society movements in the form of transnational action networks that influence public opinion (Keck & Sikkink, 1998), the media (Pandey & Kurian, 2017), political parties in government (Tobin, 2017), and those who are not necessarily represented in governments or parliaments but whose appeal to voters can motivate political parties closer to power to include some of their environmental demands into their own programs, as well as actors on sub-national levels such as cities and their transnational networks (Davidson & Gleeson, 2015). In the intergovernmental arena of IEAs, these actors need to ultimately influence states’ willingness to act through international law. The context-related drivers influencing agency (related to the IEAs) include the availability of finance, zero carbon technologies and innovative practices at competitive prices. For example, the costs of renewable energies have reduced significantly between 2005 and 2015 and beyond, which made them a central enabling factor for the Paris Agreement (Meckling, 2018). Practices derived from indigenous and traditional knowledge as well as innovative business models around microloans can also be powerful enablers that provide the framework conditions for more ambitious environmental agreements and their effective implementation. Disabling factors are, for example, prohibitively high implementation costs; obstacles that hinder the dissemination of sustainability enabling technologies (Brant & Svendsen, 2004), such as trade barriers and intellectual property/licensing rights; difficult political conditions including low public support, a pre-occupation with other economic,
financial, political, or security priorities (Scobie, 2018); and pressing social and development needs.

3 Methodology

The core of our methodology is a systematic review of agency research published in INEA between 2003 and 2020, which is further complemented by the findings of the Earth System Governance harvesting initiative on agency (Betsill et al., 2020) and a wider expert-based review of the environmental and sustainability governance literature on agency. The initial selection of articles that addressed ‘agency’ was made by the INEA editorial team based on a keyword search. This yielded a set of 72 papers published between 2003 and 2020. After scanning titles and abstracts, 68 papers were retained and four papers were excluded for their lack of relevance with regard to agency. The set of 68 articles were clustered into three major categories based on the type of actors whose agency in relation to IEAs was prominent in the analysis: states, intergovernmental organisations, and non-state actors. The last category was a mix of actors including non-governmental organisations, local governments, and courts. The IEAs that were addressed ranged from traditional hard law treaties to soft law instruments. In some cases, the papers focused on agency within an international organisation that has an environmental or sustainable development focus. As these institutions are based on hard (or soft) law instruments, we approached them with the same analytical framework as the papers focused on treaties applicable to states. This means that we consider that international organisations can be examined either as an actor or as an international environmental agreement. The papers were divided among the authors for mapping and analysis.

In an initial mapping of the content of the papers, we found that the abstracts provide detail of concepts, empirical focus, and methods used in the papers. We categorised, for the purpose of the mapping, the papers according to their study design (e.g. case study, normative/theoretical reasoning, modelling, etc.), methodology (e.g. qualitative including interviews and document analysis, stakeholder network analysis, quantitative analysis, etc.), theoretical perspectives (e.g. two-level approaches, transnational action, rational choice models, sustainable development and environmental justice framings, etc.), type of agency, and empirical focus.

4 Overview of agency-related research in INEA 2003–2020

This section provides an overview of our systematic mapping of the articles on agency related to IEAs published in the journal INEA during 2003–2020 (see Fig. 1) and the categorisation of articles according to the categories described in the methodology section above (see Table 1). The empirical focus of most papers was predominantly on climate change, while the analytical focus was often on themes related to policy, governance, and related process/es from global, transnational, international to national and domestic level/s, with particular emphasis on negotiation, implementation, agency, and the influence of actors such as states/country/ies, governments, the UN, institutions, etc. Many studies also explored themes related to sustainable development, and context/s for governance including networks, institutions, coalitions and technology.
Most papers focused on international and global environmental policy and governance with states as central actors. Actors beyond individual states and coalitions of states that receive attention are NGOs, stakeholders, partnerships, and UN organisations. Regimes, institutions, conventions, and agreements are frequently analysed. Empirically, climate change dominates heavily but other fields such as energy, forests and water are

| Core feature categories                              | Negotiation of IEA | Implementation of IEA | Outcome of IEA |
|------------------------------------------------------|--------------------|-----------------------|----------------|
| **Overview/all articles**                            | 29                 | 28                    | 7              |
| **Methodology**                                      |                    |                       |                |
| Qualitative (e.g. documents/interviews)              | 9                  | 10                    | 4              |
| Discourse analysis                                   | 3                  | 0                     | 0              |
| Network analysis                                     | 1                  | 2                     | 2              |
| Quantitative analysis                                | 4                  | 2                     | 0              |
| Other                                                | 4                  | 2                     | 2              |
| Not explicit                                         | 10                 | 10                    | 1              |
| **Theory/theoretical perspective**                   |                    |                       |                |
| Agency theories                                      | 9                  | 5                     | 2              |
| Two-/multilevel approaches                           | 1                  | 1                     | 0              |
| Transnational governance                             | 1                  | 1                     | 1              |
| Rational choice                                      | 1                  | 2                     | 0              |
| Sustainable development framing                       | 0                  | 5                     | 2              |
| Environmental/climate justice                        | 3                  | 2                     | 0              |
| Other                                                | 7                  | 2                     | 2              |
| Not explicit                                         | 6                  | 13                    | 1              |
| **Empirical focus**                                  |                    |                       |                |
| Climate change                                       | 23                 | 10                    | 0              |
| Biodiversity                                         | 1                  | 1                     | 0              |
| Sustainable development/SDGs/MDGs                    | 2                  | 3                     | 1              |
| Energy                                               | 0                  | 2                     | 2              |
| Forestry                                             | 0                  | 1                     | 1              |
| Water                                                | 1                  | 6                     | 1              |
| Other                                                | 3                  | 7                     | 1              |
| Geographical focus (Location of main actor/s analysed)|                    |                       |                |
| OECD/global north (and transition countries)         | 13                 | 7                     | 4              |
| Global south                                         | 2                  | 5                     | 2              |
| Both global north and south                          | 15                 | 13                    | 1              |
| Other                                                | 0                  | 0                     | 0              |
| Scale/governance level (of primary location of agency analysed) |    |                       |                |
| Global                                               | 23                 | 18                    | 4              |
| Regional                                             | 3                  | 3                     | 0              |
| National                                             | 0                  | 4                     | 1              |
| Sub-national                                         | 0                  | 0                     | 1              |
| Mixed                                                | 0                  | 3                     | 1              |
also addressed. Many analytical concepts are related to politics—power, interests, leadership, legitimacy, participation, coalitions, authority, and some are related to economics (growth, economy, financial) and only a few are related to law (convention and justice).

The articles published by INEA on agency span across a wide range of methodologies, theoretical lenses, IEAs and levels of governance (see Table 1 and the more detailed results in Table 2 in the supplementary materials). There is an overall strong focus on empirical research of one specific IEA. States, and to a lesser extent coalition of states, were the main actors analysed in articles on the negotiation of IEAs. For implementation and outcomes, there is a larger diversity of actors analysed, including intergovernmental organisations, states, and civil society organisations.

Methods were predominantly focused on qualitative analysis, in particular using discourse analysis, stakeholder network analysis, and process tracing based on documents and interviews (e.g., Atela, 2017; Downie, 2016), and, to a much lesser extent, quantitative analysis of large-N datasets and databases as well as game-theory approaches (e.g. Wu & Thill, 2018). Quantitative analysis was used relatively more for articles focused on the negotiation of IEAs—and modelling was exclusively used in this category. Articles used a broad range of theoretical perspectives and frameworks to underpin their empirical analysis, in particular agency-related frameworks, two-level games and analyses across two or more levels (Pickering & Mitchell, 2017; Rietig, 2014), transnational governance, rational choice modelling, sustainable development framing, among others.

As highlighted above, there is a dominant empirical focus on global climate governance, including hard law climate treaties such as the Kyoto Protocol and the Paris Agreement, but also soft law initiatives such as the Asia–Pacific Partnership on Clean Development and Climate (APP). The focus on global climate governance had noticeable peaks around, and after 2009 and 2015, the years for important deadlines in the UNFCCC process. There are several articles on global environmental and sustainable development governance related to the Commission on Sustainable Development (CSD) and the United Nations Environment Programme (UNEP). There are very few papers related to biodiversity, including one on the Convention on Biological Diversity (CBD). The absence of any papers on the negotiation of IEAs on energy, water, and forests is striking (while there are a few papers on implementation and one IEA related to fisheries). Overall, there are many empirical domains entirely absent, such as chemicals.

The multilevel character of governance is evident in articles on implementation of IEAs at the local, national, and regional (EU) levels, such as climate policy (Korppoo, 2016), the SDGs (Gupta & Vegelin, 2016), green economy/transitions (Bratman, 2015), water governance (Fujikura & Nakayama, 2009), and (predominantly renewable) energy policy (Brandt & Svendsen, 2004). Most articles examine the implementation and outcomes with regard to effectiveness and legitimacy in developed countries/the global north and globally. Though there are case studies on the global south, the university affiliation of the authors, however, is predominantly from the global north.

5 Agency in the negotiation, implementation, and outcomes of IEAs

The sections below analyse the core aspects of the reviewed articles for the three core elements of the analytical framework laid out in Sect. 2: the negotiation, implementation, and outcomes of IEAs. The frequencies of the articles related to negotiation, implementation, and outcomes of IEAs with regard to the methodology used, theory, empirical focus
and scale/governance level are summarised in Table 1. A comprehensive coding table is included in the supplementary materials, which includes the classification of each article.

5.1 Negotiation of IEAs

A significant number of agency-related articles that focus on state actors published in INEA analyse their role (as individual countries or coalitions) in the negotiations of IEAs (e.g. Parker & Karlsson, 2017). They look at the drivers (positive or negative for strong IEAs) of agency dynamics over the national and international governance levels (Korppoo, 2016). Research predominantly examined one IEA, but in a few cases also adopted comparative approaches with analyses of the role of one or several countries in several IEAs and regimes (Atela et al., 2017; Hegelund & Buan, 2009; Kim & Chung, 2012; Oh & Matsuoka, 2015). Agency-related drivers included motivations linked to national interests such as energy security, economic growth, trade, technology transfer or the protection of economic sectors (Afionis & Chatopolous, 2010; Hegelund & Buan, 2009; Skodvin & Andresen, 2009; van Asselt et al., 2009; Walsh et al., 2011) or ideological or strategic factors not linked to the issue itself (e.g. Afionis & Chatzopoulos, 2010). Chasek (2007, 380) notes for the USA that ‘hubris, disillusionment with political internationalism, the constitutional separation of powers and a backlash against the United Nations’, influenced the low interest in international collaboration on the environment, while Parker and Karlsson (2017, 447) identify the desire to address but also to use climate change “to establish itself as a global leader”.

Domestic institutional contexts can also have significant influence on the ability to have high ambitions in IEA negotiations. Skodvin and Andresen (2009) describe how the USA is biased towards a status quo due to senate filibuster rules. Van Asselt et al. (2009) show how a lack of effective coordination mechanisms among involved ministries make for a fragmented and unclear negotiation position, and Hegelund and Backer (2007) stress how China’s cautious attitude towards IEAs is linked to concerns about constraining sovereignty and influencing internal affairs.

A central aspect of agency research on the negotiating of IEAs are the negotiation strategies used by individual countries and within coalitions (Audet, 2013); the conditions under which they were successful to further their interests; and the factors that influence whether their objectives reflected in the negotiated outcome (Schulz et al., 2017). Negative drivers include the presence of strong powers who block movement towards an agreement (Rosendal, 2007), low credibility due to a lack of coherence between domestic action and negotiation ambition (Vogler & Stephan, 2007), a lack of scientific consensus; political sensitivities linked to history and the preference in some cases for bilateral agreements (Kim, 2014).

Developing countries and in particular least developed countries exert effective agency by highlighting the existential risk of climate change to their populations and their need for international support (Sforna, 2019; Walsh et al., 2011). However, they have had limited agency in the treaty design, e.g., in the REDD+ architecture (Atela, 2017), while major powers such as China and India often set the tone for the G77 coalition (Walsh et al., 2011). China’s position has moved from a cautious bystander to more active engagement over time (Hegelund & Backer, 2007; Hegelund & Buan, 2009). Coalitions or groups of states that share common negotiation positions exercise agency in climate negotiations (Bhandary, 2017; Wu & Thill, 2018). Coalitions can, however, also become unstable and thus weaken agency, such as when uncertainties about the extent of climate change
damages and abatement costs reduced the stability of climate coalitions (Meya et al., 2018). Challenges also arise from time pressures; unclear scientific evidence and a lack of leadership as illustrated by the case of the World Commission on Dams that struggled to arrive at clear outcomes (Fujikura & Nakayama, 2009).

Over time, the presence, influence, and relevance of non-state actors in IEA negotiations have increased (Downie, 2016; Thew, 2018). However, non-state actors are highly diverse and possess very different capacities with regard to financial resources, expertise on specific issues, awareness of power sources and ability to disseminate lessons learned on effective participation strategies to influence national governments and the overall IEA negotiation process. This is particularly the case for constituencies such as Youth NGOs (Thew, 2018) or indigenous communities that had limited opportunities to directly participate in the negotiations on REDD even when invited to provide input (Schröder, 2010).

5.2 Implementation of IEAs

The IEAs negotiated at the international level, like all international hard and soft laws, require implementation on the regional, national, and local levels. They do so, e.g., by shaping national governance arrangements (Korppoo, 2016) including coordination mechanisms between the government and various non-state actors such as civil society actors and local communities, international and development agencies, and environmental and economic interest groups (Brandt & Svendsen, 2004; Overland & Reischl, 2018; Zhou & Mori, 2011). Afionis and Chatzopoulos (2010) identify the domestic and international positive and negative drivers of agency in Russia for the ratification of the Kyoto Protocol by Russia as a key element of implementation. Pickering and Mitchell (2017) likewise identify both domestic factors such as the government’s political orientation and public concern about climate change as well as international factors like commitment to multilateral agreements and international peer pressure in their case study on Australia’s implementation of financial commitments in the climate regime. Moynihan and Magsig (2020) uniquely focus on agency of courts for the implementation of water-related IEAs, exercised by clarifying and interpreting vague norms and policies.

While states have the primary role to implement IEAs, intergovernmental organisations such as the UN Environment Programme, the Commission for Sustainable Development and the Global Environmental Facility also support implementation by, e.g., providing assistance and support through advice on policy formulation, public awareness raising, training, offering a forum for the exchange of experiences with domestic policies and providing other forms of technical assistance (Heggelund & Bakker, 2007). Several articles analyse the drivers of individual states’ efforts to exert agency on and within these organisations (Rosendaal, 2007; Chasek, 2007). In many cases, international secretariats and bureaucracies have agency in policy decisions and consultation processes in ways that may support the agendas of country representatives and policy-makers that may otherwise have less influence at international and national levels. The success of such assistance, however, depends on enabling factors such as the compatibility of that IO’s approaches with the domestic decision-making structures, political support and in particular positive engagement by NGOs involved in the implementation (Barnes-Dabban & Karlsson-Vinkhuyzen, 2018). However, the growing influence of non-state action in sustainable development raises concerns that governments of the global south may have their influence reduced by powerful private sector actors. Studies on REDD also highlighted how the voices of powerful industry actors tend to drown those of rural communities (McAfee, 2016), indigenous
groups and other civil society actors (Kuchler, 2017) in the national climate governance space. This power imbalance contributed to the development of transnational movements of indigenous groups (Schroeder, 2010).

The successful implementation of international programs such as the Clean Development Mechanism (CDM) on the national level is facilitated by enabling factors such as the presence and active engagement of sufficiently empowered local energy stakeholder networks characterised by high social capital, reciprocity, structurally open interactions, market-friendly renewable energy policy and capacity of the non-state sector to participate in renewable energy deployment (Benecke, 2011).

5.3 Outcomes of IEAs

There were notably fewer articles on agency related to IEA outcomes in the literature that formed the basis of this study. Rather outcome related papers focused less on the IEAs themselves and were more thematic, focusing, e.g., on issues related to inclusive development through the SDGs (Gupta et al., 2016) or networking and agency in renewable energy governance (Benecke, 2011) or on Gramscian hegemony and subjectivity formation in the context of the green economy (Bratmann, 2015). The negotiation and implementation of IEAs results in varied levels of effective and legitimate outcomes linked to the design and content of the IEAs, as well as to the degree of and approach to implementation that takes place. The ambition of governments to negotiate and/or implement IEAs can be influenced by their political orientation and public opinion/concern about an issue such as climate change, which in turn can impact upon acting on international commitments for climate finance by Australia (Pickering & Mitchell, 2017). Because of weak negotiation agency among states, implementation on the national level can also be hindered and result in low effectiveness of domestic policies and a lack of coherence (Atela et al., 2017). The limited inclusion and participation opportunities for indigenous communities in national policy implementation of policies under climate-related IEAs such as those aimed at REDD (Schröder, 2010) highlight a deficit in input legitimacy that has implications for the effectiveness of the outcomes, considering the role played by these communities in forest management. Concern with such legitimacy gaps sparked more coordinated efforts and was the catalyst in the emergence of the transnational movement of indigenous groups within the global climate governance space in the 2010s and in the growth of youth NGOs in climate regimes (Thew, 2018).

The international agreements related to climate change have normative power, with the potential to increase the legitimacy of local groups or to reduce their agency. National governments can be hesitant to allow these groups’ agendas to be included, which in turn prompt local groups to use the goals of IEAs as a lever to get governments to act. Competing interests such as local environmental conservation versus implementing large-scale renewable energy infrastructure (Bratman, 2015) in REDD+ projects can reduce the effectiveness of IEAs when open and transparent decision-making processes are foregone that respect local community and equity values on essential issues such as access to water stewardship (Ingram, 2006), equity and local participation in energy policy (Bratman, 2015). In the case of the transnational trade in ecosystem services under REDD+, the implementation of IEAs can have the unintended effect of reducing the agency of local actors and masking or entrenching forest and livelihood loss (McAfee, 2016). Stakeholder forums and deliberative democracy approaches are frequently used by governments to address such conflicts (Fujikura & Nakayama, 2009); however, they can also contain structural power
inequalities such as stakeholder categorisations that reduce agency, input legitimacy and the deliberative values of openness and plurality in institutional processes such as those of the CDM (Kuchler, 2017).

6 Discussion

Based on the findings presented above, we can identify several patterns in research on the agency of IEAs in the INEA journal. The actors included a wide range of national actors in the form of governments from the global north and south, and an even wider range of non-state actors such as secretariats of IOs, NGOs, and other civil society stakeholder organisations, businesses, academia, and cities. In many cases, papers analysed their interactions and influence in transnational and/or global networks across multiple levels of governance.

The methods were predominantly qualitative with a majority using document analysis and interviews as primary sources of data collection. Yet also these provided very limited information on specific sources. In some cases, this can be understandable for the case of elite interviews. Yet, the very large number of articles that do not explicitly describe their methodology raise calls for improvements on transparency (see below). There is a paucity of articles doing small-n comparative analysis across regimes or countries (whether on negotiation or implementation of IEAs), and furthermore research is lacking on the methodologies associated with such small-n studies. There is a parallel gap on comparative, quantitative large-n studies and modelling. Those available focused on the negotiation of IEAs leaving a gap in systematic comparative studies of implementation and outcomes. Regarding theory, there is a good spread of theories used, but it is also noticeable how many papers do not make explicit which theoretical lens is used, particularly among the articles focused on implementation. This is interesting and worthy of further reflection in the scholarly community around INEA (see below).

The dominance of climate governance articles mirrors the status of climate change in funding, political, and societal discourses—resulting in little or no attention paid to IEAs on many critically important issues such as biodiversity, forests, water, air pollution, and chemicals. The dominant focus on developed countries can be linked both to the dominance of authors from this region. However, it can also be partially a result of scholarly choices to analyse those with most agency, those who have a dominating role (power) in global environmental politics whether it concerns responsibility for pollution as well as epistemic, financial, or strategic resources for negotiation and implementation.

The review allowed us to summarise, through the lens of the proposed analytical framework focused on the negotiation, implementation, and outcomes of IEAs some agency and context-related positive and negative factors driving IEA-related agency in a multilevel context. Some important findings on agency related to how IEAs emerge. In line with their rising importance in negotiating IEAs, there is an increasing academic attention to the role and influence of non-state actors in the negotiation of IEAs. The attention to especially national governments and coalitions within IEAs remains high with a keen interest on leadership and policy entrepreneurial approaches that allowed actors to be successful in exercising agency and thus influencing outcomes on the international level (Bhandary, 2017; Chasek, 2007; Rosendaal, 2007; Schulz et al., 2017). Second, once major IEAs are negotiated and it is increasingly clear how different actors, both governments and non-state actors, influenced the outcome, the academic community’s focus has also addressed questions on the implementation and outcomes in terms
of effectiveness and legitimacy on the national and increasingly local levels (Brandt & Svendsen, 2004; Korppoo, 2016), and how this in turn can affect further IEA negotiations (Pickering & Mitchell, 2017). Third, while attention to developed countries/the global north remains high with a particular focus on either major economies such as the European countries/the European Union (Parker & Karlsson, 2017), Japan (Oh & Matsuoka, 2015; van Asselt et al., 2009), Russia (Afionis & Chatzopoulos, 2010; Korppoo, 2016), South Korea (Kim, 2014), and the United States (Chasek, 2007; Skodvin & Andresen, 2009), there is a constantly high interest in the influence of global south countries and their motivations and strategies in IEA negotiations (Walsh et al., 2011), and in particular the implementation and outcomes of IEAs in the global south. Fourth, the strong scholarly interest on agency in the UNFCCC and climate governance in general remains very high and has been steadily increasing over the previous two decades (e.g. Afionis & Chatzopoulos, 2010, Oh & Matsuoka, 2015, Rietig, 2014). Other areas of interest are biodiversity and sustainable development-related IEAs such as the Convention on Biological Diversity, the SDGs, energy agencies (Overland & Reischl, 2018), water governance regimes as well as local/national level implementation and effectiveness with regard to water and forestry governance (Fujikura & Nakayama, 2009; Gulbrandsen, 2005).

With regard to the other questions around agency, our findings point towards the importance of strong agency on the national and international level and the limited ability of non-state actors to replace government responsibilities. There is an increasing consensus in the literature that non-state actors are important and, in many cases influential actors both in the negotiation of IEAs (despite their lack of a formal role in these national government/party driven processes) and especially in the implementation of IEAs. The quality of communication and coordination between the national government, sub-national governments and non-state actors serve as positive or negative factors for the outcome of IEAs (Downie, 2016; Parker & Karlsson, 2017). Domestic constitutional contexts and political dynamics are highly influential (Skodvin & Andresen, 2009) such as the role of veto-players. Korppoo (2016) shows how in a non-democratic context such as Russia with corruption and limited transparency implementation can never be taken for granted, even for nationally adopted policies. The outcome of IEAs refers to the effectiveness of IEAs to address the environmental problem, and especially their legitimacy in terms of equity, equality, and fairness for the affected local communities. In the case of developing countries/the global south, international organisations, and agencies such as UNEP, UNDP and others can play a role to facilitate the implementation and support outcomes (Heggelund & Backer, 2007), while they can also be part of the problem. However, it remains highly unlikely that IEAs can be effective in solving environmental problems with weak governments or, in many cases, governments that actively seek to obstruct environmental action due to competing economic and/or social domestic interests (Chasek, 2007; Skodvin & Andresen, 2009). Research findings point towards the importance of strong agency by and within governments that see the need to effectively address environmental degradation in achieving appropriate IEA negotiation outcomes and in particular for the implementation on the national level (Pickering & Mitchell, 2017).

Most progress that has been made in negotiating IEAs is only incremental if IEAs are not implemented and result in effective and legitimate outcomes. The second aim of our paper was to suggest directions for research on agency in relation to IEAs and particularly how INEA can stimulate the contribution to these. Considering the widespread acknowledgement that implementation in countries is insufficient, more attention to the national
level and the agency dynamics between negotiation, implementation and outcome may warrant considerably more attention in the journal.

Related to this, another valuable line of research would be the accountability dynamics post-IEA adoption and agency in these. Who is holding states to account for insufficient implementation, through what mechanisms and with what effects and how can accountability be strengthened? It is to be expected that considerable research on formal compliance mechanisms of IEAs, is addressed in other (including legal) journals but accountability can take place in many arenas, not only formal international or domestic courts (Karls
don-Vinkhuyzen et al., 2018). The multilevel context that many INEA articles analyse would here be particularly valuable considering the frequently weak or absent accountability mechanism in the global regime—and much stronger ones at national level including courts, parliaments and audit institutions. A comparative approach of studying what motivates, enables, and disables agency in accountability dynamics between regimes and countries could bring valuable findings for those actors who want to see strong implementation.

The studies we have analysed provide a number of pointers for where policy needs to move. They show how agency is still very unequally distributed in the international system, both horizontally as big powers can block negotiation and implementation of international agreements—but also vertically as domestic institutional structures and interests can over-ride inclinations to put global concerns in focus. Any efforts to facilitate stronger international agreements thus need to address the underlying principles of the current world system; state sovereignty and gross inequity. Furthermore, the centrality of government agency in implementation, and thus the ability of internal coordination mechanisms in a multilevel government context does not diminish the importance of non-state actors in this field. These actors can in transnational cooperation or domestic coalitions strengthen pressure on states to act, and engage in direct implementation actions in collaboration with government and intergovernmental organisations. The reviewed articles show that implementation of an IEA can never be taken for granted as domestic factors such as corruption, blocking by veto-players and lack of social capital can provide significant constraints on agency focus.

7 Conclusion

With this review of the agency-focused literature published in INEA as flagship journal on IEAs, we contributed a conceptual framework that facilitates the systematic study of agency with regard to negotiating IEAs and assessing their implementation in terms of effectiveness and legitimate outcomes. By addressing this gap in the agency-related literature on global environmental/earth system governance (Betsill et al., 2020), we highlighted major trends and avenues for further research. Overall, the academic community has made significant progress in highlighting the factors that enable and disable successful agency as well as offered far-reaching empirical evidence on negotiating and implementing various IEAs in the form of case studies focusing on both the global north and the global south. The case study focus is occasionally supplemented with quantitative research offering insights into comparative aspects. In particular, the rise of non-state actors has been a vivid focus of research while still paying appropriate attention to the central role and responsibility of governments.

Based on our review, we can provide some directions both for future research on agency in environmental governance in general and for INEA in particular. First, a major research
gap remains on agency with regard to the implementation and outcomes of IEAs on the national level and transnational realm that addresses how IEAs can effectively and legitimately tackle environmental problems. Drawing on approaches developed in the public policy literature on policymaking, policy implementation and policy evaluation, e.g., around policy entrepreneurs, learning, and policy transfer may be promising, as well as research in law/legal studies on the conditions for effective litigation (Setzer & Benjamin, 2020). Second, given the rich and in-depth empirical case study literature on IEAs, future research could move towards a stronger comparative focus with small-n and large-n studies on including and further developing robust methodological and theoretical contributions that allow a more systematic and comparable study of future developments on agency related to IEAs. The journal INEA could support this research direction by including a need for increased transparency on the methods and theories used in articles, and issuing special issue calls on comparative research particularly on agency dynamics in implementation.

So, what do our findings mean for policy-makers including governments, international organisations, civil society, academia, and the private sector gather in Stockholm in June 2022 to commemorate fifty years of multilateral collaboration for the environment and aiming the event to ‘act as a springboard accelerate the implementation of the UN Decade of Action’1 for delivering on the SDGs, the Paris Agreement, and the post-2020 Global Biodiversity Framework? International rules on environment, hard and soft, remain an important part of the fabric of global environmental governance by providing a framework of shared international norms, values and expectations for governments and non-state actors. The conclusion of the Paris Agreement, for instance, showed that it is indeed possible to achieve ambitious IEAs even in consensus-based decision-making, but it has also highlighted that global problems are not solved through negotiating IEAs alone. One of the key deficits that Stockholm + 50 needs to address is the aspect of implementation to ensure effective and legitimate outcomes in addressing environmental challenges. How can states become more trustworthy in keeping the individual and collective commitments they make in IEAs? Important enabling factors are group pressure among countries and non-state actors that are focused on leading by example and showcasing both commitments and achievements. These move away from consensus-focused decision-making on minimal action towards positive peer pressure that rewards ambitious action in addressing environmental problems such as climate change. These norm-based approaches however still offer little in the way of enforcement. The binding role and jurisdiction that we would expect courts to play in a domestic context is simply not there at the international level, e.g., considering that countries can voluntarily choose if the International Court of Justice has jurisdiction over them. What international courts can do now is only to clarify norms (Moynihan & Magsig, 2020). The principle of national sovereignty is the underlying reason for this voluntary character of international agreements. This is a fundamental element for the rule of international (environmental) law that should be discussed openly by academics, policy-makers and the broader public. Equally important for tipping the agency dynamics of IEAs in favour of improved environmental outcomes are deep-reaching individual and collective reflection on how to reduce inequality and promote justice in this humanity’s only home.

A number of lessons for policy-makers and negotiators of IEAs emerge. First, there is a considerable power imbalance between countries of the global north and smaller global

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1 See https://www.stockholm50.global/about.
Agency dynamics of International Environmental Agreements: south countries resulting from different capacities to effectively participate in IEA negotiations. This needs to be taken into account and be addressed to improve environmental justice and the input legitimacy of IEAs. Second, positive peer pressure, public attention and other norm-based approaches on the international level remain of high importance in the face of limited enforcement mechanisms. In addition to national governments, intergovernmental organizations and non-state actors play important supporting roles. Third, the multilevel governance character of the framework conditions for the negotiation, implementation and outcomes of IEAs is a central determining factor for either strong or weak agency. This means that the quality of communication and coordination between multiple governance levels is important, as is the commitment by governments to support effective implementation of IEAs. Especially domestic incentive- and institutional structures impact upon states’ ability to actively influence IEA negotiations. These include a mismatch between states’ ambitions in IEA negotiations and their domestic ability to implement IEAs, as well as domestic power relationships and politics. Fourth, the output legitimacy of IEAs is highly relevant for effective implementation and thus outcomes. Only if relevant actors including local communities that were negatively affected by the environmental problem benefit in terms of the environment, economy and social aspects, IEAs can be sustainable through continued buy-in and support across governance levels.

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