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The Just Energy Transition Partnership in South Africa: **Identification and Assessment of Key Factors Driving International** Cooperation¹

Heiner von Lüpke

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Abstract

This paper investigates the implications of implementing the Just Energy Transition

Partnership (JETP) in South Africa by exploring the factors that are at work when donors and

recipients interact with each other. It analyses the JETP using global cooperation theories on

climate change and identify mutual trust, based on shared norms; and process legitimacy via

institutionalisation as the factors which can promote cooperation between donors and

recipients. The paper contributes to the literature on international climate finance by

providing novel insights through the analysis of the South African JETP as a single case study.

It shows that the JETP is in fact a transnational policy process that needs to be institutionalised

and legitimised to improve shortcomings of established conditionality instruments. The

results might also inform the design of a climate club as proposed by the G7 as the JETPs are

referred to as a possible instrument to cooperate with emerging economies.

Keywords: Just energy transition partnerships, International climate finance, International

climate cooperation, South Africa

JEL-Codes: O13, O19, Q54, H87

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an earlier version of the article.

Introduction

The agreement on the Just Energy Transition Partnership (JETP) with South Africa during the 26th UN climate change conference in 2021 marks a new category of international climate finance and support, both for the amounts of finance initially pledged, as well as for the level of ambition of the partnership (UK, 2022). The JETP is hailed as a truly transformative partnership with the potential of changing a country's entire sector towards climate-compatible development in a socially just manner. From the perspective of the international community, the partnership can be seen as seeking new ways to find cooperative arrangements that aim to decarbonize while pursuing development goals world-wide. These include climate clubs, sectoral alliances or partnerships and related climate finance designs (von Lüpke et al., 2022).

There are two dimensions, in which the JETP is being developed. The first one is the dimension of just transitions as such, which aim at transitioning energy sectors towards climate-neutral pathways in a socially just manner. This takes place in the energy sectors of nation-states, with transitions arguably being driven by political and energy sector specific motives and factors (Newell & Bulkeley, 2017). The second dimension is that of international support and cooperation. In this dimension, both the interactions between the international donors and their respective agencies on the one hand, and the domestic actors of recipient countries on the other play important roles.

This paper argues that the type and quality of interactions as well as the modalities used by donors and recipients will determine whether the two dimensions can be connected and lead to a successful implementation of JETPs.

Theoretical Approach

Climate finance research had been approached primarily through angles of demand – supply gaps (Buchner et al., 2021), effectiveness assessments based on official development assistance (ODA) principles (Nakhooda et al., 2014), instruments design (Bhandary et al., 2021) and public-private sector relationships (Mungai et al., 2022). The theoretical lens of international cooperation in the climate commons has rarely been used. Here, the latter is chosen, as it may provide a suitable starting point to explore the prerequisites for effective international climate finance. It does so by factoring in an emerging body of work, which addresses questions on how countries are cooperating in the real world to achieve the objectives of the Paris Agreement.

A common argument in economic theory posits that (policy) actors behave rationally and maximise their gains by acting in line with their interests. These so-called rational choice theories constitute the foundation for theories about the tragedy of the commons, in which the sustainable management of open access resources is obstructed when multiple users all seek to maximize their individual profits and gains. It was concluded from such theories that

a strong, top-down or centralized regulatory framework is needed to control the individual behaviour of common resource users and to steer system management towards sustainability. This theory was first challenged by economist Elinor Ostrom (1990, 2010) and her insights about sustainably managed natural resources on local levels. She argued that it was rather social norms and associated sanctions, as well as agreement among users on a locally appropriate regulation that governed behaviour. Most importantly, she concluded that the frequent interactions and communications of users, based on transparency and mutual trust, helped to overcome profit maximizing behaviour of individuals. These elements are key for so-called polycentric governance systems, which are characterized by a high level of local delegation and whose design is based primarily on local conditions. Central steering is reduced to a minimum in such systems. In later years of her career, Ostrom transferred her theories on the international level of climate policy and made similar claims about the successful conduction of climate policy through global polycentric systems (Ostrom, 2010).

Ideas of international, centralized provision of economic incentives and fines are central assumptions for climate cooperation in the form of minilaterally designed climate clubs (Nordhaus, 2015). These theories rely on the assumption that prospective member countries are motivated to join climate clubs because of the expected gain from club goods, such as access to markets for green industrial products, and to avoid disadvantages, such as restricted access to markets or trade barriers. Frequently, this string of theories also puts the idea of carbon pricing systems at the centre, i.e., the idea that like-minded countries introduce carbon pricing policies and penalize countries which do not. The principal assumption here is similar to the one described above: Political actors in climate policy are prone to free riding. This means that, in voluntary agreements, the national mitigation contributions hinge on the implementation of mitigation actions by other states, and it is assumed that countries take advantage by free riding: while other countries do their part, some countries continue to emit GHGs and evade the restructuring of their economies, thereby achieving economic gains. Accordingly, the central claim is reciprocity: It is assumed that countries will only fully engage in mitigation actions, if they can be sure that all participating countries do the same – hence, a level playing field would be established (Nordhaus, 2017).

The literature in recent years has severely challenged this set of assumptions. Scholars have found very little evidence both for free-riding concerns by policy makers and reliance on reciprocity as a condition for domestic climate policy formulation. Instead, the research points towards increasing unilateral climate action by national governments. Policy makers mostly do not make their own actions dependent on what other countries do (McGrath & Bernauer, 2017). It is rather argued by scholars such as Aklin and Mildenberger (2020) that it is the domestic costs of transforming economic sectors as well as the distributive conflicts that matter for domestic climate policy decisions. According to such arguments, international cooperation for global climate protection should not be framed as a collective action problem, in which reciprocity and avoidance of free riding would be central elements. It rather builds

on simultaneous efforts by individual countries to transform their economies towards climate neutrality, which are driven by policy makers' responses to new emerging norms, claims by local constituencies, policy diffusion processes, and importantly, the existence of catalytic institutions (Hale, 2020). In particular, the emerging international norm of climate neutrality is argued to be an increasingly important factor for global climate cooperation (Blondeel, 2020; Gach, 2019). International climate finance should hence be conceptualized as a component of such catalytic cooperation: It provides means of implementation for transformational change processes by countries, which are however driven initially and primarily by domestic motives and concerns (Hale, 2020). The concept of international climate finance as a catalyst for international climate cooperation is depicted in Figure 1.

Factors for cooperation Trust • **Emerging Shared norms + understanding Industrialized** economies / **Legitimacy of processes** developing countries countries Agreements on rules-in-use Achieve climate & Achieve climate & development goals development goals **Achieving collective climate goals**

Figure 1. Model of international climate cooperation, including driving factors.

Source: Author's own representation based on Ostrom, 2010; Carattini et al., 2019 and Hale, 2020.

To summarise, the literature describes well what the challenges, functions, and instruments are of international climate finance to support developing countries in their climate policy efforts. However, the factors which influence whether the outcomes of such support measures are successful are less understood. By taking the JETP South Africa as a case study, this paper sheds light on the question, thereby closing the gap in the literature.

The paper proceeds as follows. After a brief overview of the methodological procedure in section 2, section 3 will introduce the chosen case study. For that purpose, the current situation of the South African energy sector will be outlined and first impressions of the JETP will be described. Section 4 will then present the results gathered in the interviews. First, the policy processes and international implications of the JETP will be analysed. Second, a series of necessary preconditions for the successful implementation of the partnership will be presented. Finally, section 5 will provide a conclusion and policy recommendations for the further process of JETPs.

Methods

The methods applied in this work are qualitative and use single case study design. The data was collected through semi-structured interviews with key stakeholders in the JETP process of South Africa. Due to the political sensitivity of the JETP process, the public sector is less represented in the interviews than academia and expert communities.

The interviews lasted between 45 and 90 minutes, and were prepared individually, which means that 4-5 diagnostic questions (see Table 2) were prepared beforehand based on the role and expertise of the interviewee. Generally, the topics of the questions revolved around the assumed key factors, which played roles for effective cooperation between donors and recipients. The goal of the interviews was to learn about the characteristics, directionality, and interconnectedness of factors, as well as to allow entirely new aspects to emerge in the interviews. An overview on the interviews is provided in Table 1.

Table 1. Overview on the number of interviewees per actor group in South Africa during July – September 2022.

Actor type	Number of	Time period of
	interviewees	interviews
Think tanks and academia	8	July – September 2022
International organisations and donors	8	July – September 2022
Public sector	5	July – September 2022

The cooperation factors, which were examined in the study, and the questions which were posed for the respective diagnostic are included in Table 2.

Table 2. Cooperation factors examined in the study and related diagnostic questions as guidance for the interviews.

Cooperation factor	Diagnostic question
Reciprocate trustful behaviour	Do partners trust that each party will follow up as agreed? Do partners trust in each other's agenda?
Legitimacy of transnational policy processes	Is there a recognition that donor-recipient negotiations take up political and policy issues? Are such transnational policy processes legitimate?
Institutionalisation	Is there an agreement on rules-in-use? Is there sufficient institutionalisation to allow for durable cooperation?
Shared norms and understanding	Do actors share common norms? Is there a shared understanding of the partnership's objectives and contents?

This case study is idiosyncratic. At the time of writing, there is only one agreed-upon JETP globally, even though several others are under preparation. Further along the international development process of JETPs, it might be worthwhile to consider a comparative approach to learn more about cooperation factors, their interrelations, and the contexts in which they function.

Contextual Information on the case study

This section provides some contextual information as a foundation for the following case study of the South African JETP. It is divided in two sections. The first one gives a rough overview of the current situation in the South Africa energy sector. The second one introduces the JETP and its initial perception.

1. The climate-energy policy system of South Africa

The energy system of South Africa is heavily dominated by fossil fuels, with coal being the main fuel with 72 % of total energy supply as of 2019 (see Figure 2). Since 2005, the coal energy supply oscillated around 4,1 Mio TJ on average, while renewable energy expanded. Nevertheless, the latter remains on a much smaller scale with 58.000 TJ in 2019 (see Figure 3). The share of renewable energy for electricity generation has been rising constantly since 2013 (1,7 %) to 2021 (9,2 %), with analysts attributing this rise to the government-led power sector reforms, notably the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) (Ayamolowo & Kusakana, 2022).

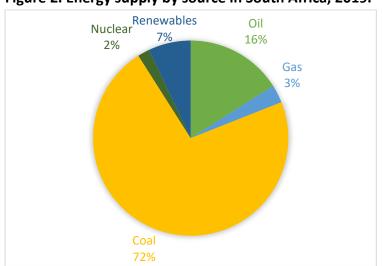


Figure 2. Energy supply by source in South Africa, 2019.

Source: IRENA, 2022.

The national importance of coal is reflected in its dominant role for electricity generation (58 %) as well as in the GDP share of 2,3 %, which entails a 40-45 % revenue generation through exports (Hanto et al., 2022).

This situation translates into a greenhouse gas emission profile, which is heavily dominated by fossil fuel related emission sources: according to government data, the energy sector contributed to 80 % of national emissions in 2017 (Government of South Africa, 2021).

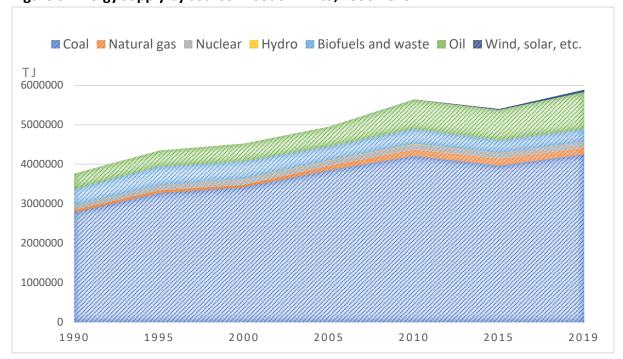


Figure 3. Energy supply by source in South Africa, 1990-2019.

Source. IEA, 2021. Copyright 2022 by IEA.

Globally, the country is the 12th largest emitter, even though overall national emissions have been declining slightly by 1 % annually since 2009 (Government of South Africa, 2021). The national climate targets are articulated through the country's Nationally Determined Contribution (NDC), which was updated in 2021: South Africa aims at an absolute emissions level in the range of 350–420 MtCO2e for 2030 (CAT, 2022), translating into an 3-23 % increase compared to 1990 levels.

Political-economy drivers for a low carbon transition of the energy sector were identified by Hanto et al. (2022) and relate to four distinct objectives, which are pursued by various actor groups: "Energy availability", "Maintaining profitability of the coal sector", "Environmental and climate protection" and "Reducing inequalities and employment insecurity". These are described briefly in Table 3.

Table 3. Political-economy drivers for a low carbon transition of the energy sector.

Objectives	Overview	
Energy availability	Energy availability challenged by lack of security, affordability, and accessibility of supply with a major capacity gap. Ensuring to meet demand is another challenge, as energy security is hampered by ongoing issues with state-owned Eskom. Making energy accessible by connecting currently unserved zones to the grid is costly.	
Maintaining profitability in the coal sector	Coal sector significant revenue source contributes substantially to domestic supply and exports. Sector provides employment for many and generates profits for influential actors. Status quo of the coal sector is affected by the phasing-out of fossil fuels.	
Environmental and climate protection	Proliferation of RES and transition away from coal necessary for reaching net zero by 2050. Challenges such as promoting RES projects at household and municipal levels and ensuring an environment that is favourable for RES uptake remain.	
Reducing inequality and employment insecurity	Energy transition constrained by high unemployment and need to consider workers from affected sectors. Ownership of energy sources shifts as a result of the low-carbon transition as most RES are private or foreign-owned. Ensuring that all those affected by the transition have sufficient involvement is key to preventing polarisation of the parties affected.	

Source: Author's own representation based on Hanto et al., 2022.

2. The Just energy transition partnership with South Africa

International support for just energy transitions in the global south is regarded as a crucial element of global climate cooperation, as the highly publicized announcement of the Just Energy Transition Partnership shows. During the 26th Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2021 in Glasgow, UK, an agreement was taken to (excerpts from the political declaration):

"Establish an ambitious long-term partnership to support South Africa's pathway to low emissions and climate resilient development, to accelerate the just transition and the decarbonisation of the electricity system, and to develop new economic opportunities such as green hydrogen and electric vehicles amongst other interventions to support South Africa's shift towards a low carbon future."

(paragraph 16) "This partnership is a demonstration of the willingness of both developed and developing countries to cooperate on a vital challenge facing humanity." (paragraph 20)

The funding, which was initially committed over a period of 3-5 years, is 8,5 billion USD. The major share of it is to be delivered through loans, a minor share through grants. An International Partners Group (IPG) was formed, composed of the donor governments (France, Germany, the United Kingdom, the United States of America, and the European Union) and South Africa. On the South African side, a climate finance task team was created with the mandate to lead the negotiations with donors, coordinate government entities, and to advise governmental institutions on the feasibility of the JETP offer (Government of South Africa, 2022). An overview on stakeholders of the South African JETP process is depicted in Figure 4.

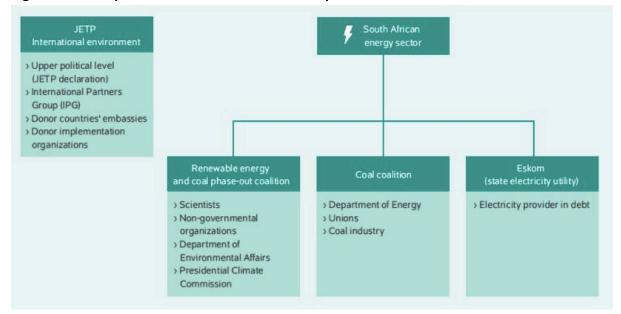


Figure 4: Participants of the South African JETP process.

Source: Author's depiction.

Many interviewed stakeholders referred to the negotiation venue as a "black box", owing to a small group of negotiation partners (representatives of the IPG and the Climate Finance Task Team) and a policy of non-disclosure of negotiation progress and interim results. As described by those interviewees, the notion of a black box transmits the impression of a process which is non-transparent and difficult to understand. Considering this state of JETP development, the analysis below is preliminary, and aims at identifying early indications of factor constellations that are conducive for cooperation, which can serve as lessons for the future course of implementation and for the planned JETPs with Indonesia, India, Senegal, and Vietnam (G7, 2022).

Results

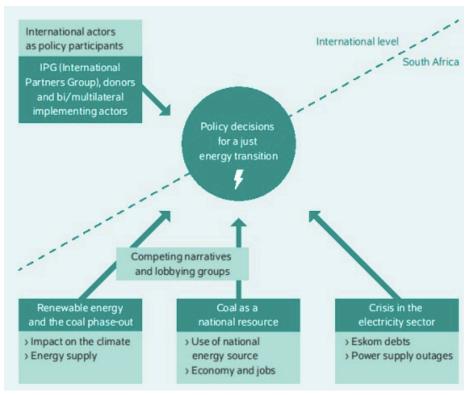
The results section is organised in a way that provides a characterisation of the JETP as a transnational policy process first. It contains a description of the policy dynamics in the energy-climate field of South Africa and shows how international actors and institutions are engaged in these processes. It is based on the results from the interview process and complemented with current academic theories and findings where indicated. In a second step, a number of factors that can be seen as necessary preconditions for the successful implementation of the JETP are identified. They relate to the role of trust reciprocation, shared norms and understanding, conducive modalities of finance instruments and institutionalisation of rules-in-use.

1. Characterisation of the JETP as a transnational policy process

The political process of the just energy transition of South Africa is highly dynamic, involving very different positions, interest groups and narratives. There are two main policy groups, one which is concerned with renewable energy development and coal phase out, and a second one, which argues for a continued use of coal. These two groups stand at odds over the future course of the energy sector development. A political factor contributing to the opening policy window - understood as a political opportunity to create solutions for a societal problem - is Eskom's indebtedness and inability to provide sufficient electricity. Widespread social concerns over affordability of electricity, public debt, and employment changes in the energy sector add up to the opening of the policy window. Furthermore, the energy sector development is influenced by international factors and elements, i.e., commitments on climate policy to the UNFCCC, and the international negotiations on the JETP as such. In this regard, the IPG - operating in the broader context of factors coming from the international level - can be described as a political actor in favour of the energy transition, but with an unclear mandate or legitimized role in the political process (Figure 5).

There are two narratives in the political process in which the JETP is negotiated, which differ not only in terms of academic foundations and political ideas, but also in terms political proponents, and lastly, also race. Both narratives mix facts and storytelling and constituting contradicting coalitions.

Figure 5. A stylized representation of the policy dynamics for a just energy transition in South Africa.



Source: Author's own representation based on interviews.

The renewable energy-modernisation narrative. Academic reports state that coal must be phased out, renewable energy massively upscaled, gas and oil reduced. This is a more fact-based narrative, concerned with quantitative elements. It builds on arguments of economic efficiency, allowing for larger participation of the private sector in the energy generation business. Interviewees from the public sector maintain that most of corporate South Africa buys into that narrative, with the natural exception of coal-based industries. These interviewees state that the banking sector, which is astute in developing its own version of the narrative to use time constrained policy windows to advance its financial transactions, also sides with the coal-based industries. As stated by a public sector interviewee, "the target year for net zero should be 2060, instead of 2050, as immediate coal and fossil fuel investments still are legitimate" is the typical discourse from the banking sector.

Coal as the local hero. The second narrative is built around coal as an important national resource, which provides income, employment, and state revenues. Interestingly, this one mixes facts with sentiment building, involving statements such as the international community not being able to achieve its own climate and energy policy targets, but advising South Africa on how to fulfil its targets (tweet by former CEO of Eskom Jacob Maroga). An interviewee from the public sector refers to a number of social media postings by the ex-CEO of Eskom and says it is "too hard to keep track in terms of fact checking". The narrative postulates that,

traditionally, the coal sector employed mostly black Africans. It appeals to the national pride of South Africa by referring to the national ownership of coal and arguing that giving it up for the sake of the transition will incur large costs and damage the South African economy. It is also interwoven with the neo-colonial narrative, which states that it will likely again be countries from the global north that seek to exploit renewable energy resources to the detriment of the South African economy, see for instance Times (2022). Proponents of this narrative caution against it and warn that the foreign push for renewable energy development is meant to further that objective. This narrative also argues that privatisation of renewable energy development will lead to the creation of markets for western companies.

At this stage, as the political process is still ongoing, it is rather unclear how many stakeholders and if so, to what degree, will really buy into the second narrative or the first one. Most interviewees state that the narratives influence the political process by influencing actors' perceptions and opinions about the future development of the energy sector. However, it is also suspected that stakeholders with hard economic interests will be agnostic to narratives, as they are mostly interested in material gains.

The IPG as an actor in a transnational political process? In relation to the role of the international actors in the South African policy process, two perspectives emerged: one sees them as a funding entity and cooperation partner, the other as a policy actor. These two roles are closely interwoven up to the point where cooperation partners become policy actors, as will be explained in the following section.

To start, the question will be addressed, whether international donors and domestic policy actors share an understanding of the political direction. A shared understanding of objectives and contents of cooperation is regarded as essential for a successful JETP implementation. While this may be a truism for cooperation in general, it becomes very relevant in terms of the political process of the energy transition of South Africa. This is because a process of negotiating a political outcome, which may have implications for South Africa as a whole, requires a certain degree of legitimisation and process qualities if it is to be successful. In the following section it is explained why achieving a common understanding on the nature and objectives of the JETP is challenging: there are divergent views on the energy transition by South African stakeholders in the political process, and a political decision over the exact objectives is not yet taken.

According to interviewees from both public sector and think tanks, there is a broad consensus that the energy transition should happen, which is due to a variety of motives such as energy security, health, economics but also international commitments. Yet, there is less consensus on how this should be achieved: there is divergence with regards to the timing of coal phase out, which coal plants should be shut down and when, and the same goes for the way renewable energy is phased in. Parties also have different opinions whether the electricity

sector should be privatised, or more specifically, to what degree and under what conditions should it be privatised. The political process for the energy transition to address these issues is complex in terms of the different actors, interests and ideas which are brought forward in the discourse.

An interviewee from the donor group observed that there is an inconsistency between the energy sector policies and the JETP discourse and developments, reflecting different positions by sectoral actors in the process. The minister of energy and mineral resources is ambiguous in his positions on the JETP: publicly, he "likes to be seen as a hardline coal supporter" (public sector interviewee), and to show a tough stance on the donors and the international community ("we are not dancing according to their tune", ibid), but allegedly - behind the public scenes - he is supportive of the transition. This is also reflected in his position to be open to revising the Integrated Resource Plan for the energy sector and the decision to lift the licensing limit for renewable energy distributed systems to 100 MW. An explanation for this ambiguous role, offered by a donor interviewee, is that the minister caters to his constituency and thereby the coal interest group on the one hand, but, on the other one, has to respect presidential orders in favour of the JETP.

The question, in what areas the 8,5 BN USD should be invested, is a political one as "it will very much depend on which elements of the JETP investment plan get funded and implemented, and hence create facts, which will guide future policy directions" (interviewee, public sector). Next to the question whether the donor finance should be spent on e.g., grid infrastructure for decentralised renewable energy, which is rather a question of financial engineering, there are a number of other political questions, in which the donors want to get involved. These questions relate to the overall ambition level of the JETP, whether the energy transition be paradigmatic, changing the sector as a whole, or will it be an incremental process, to what degree and under what conditions should the energy sector be privatised.

Addressing these questions implies a public role of the actor who engages in the process. However, the experience of donors is that it is contested whether they should be given a role in the political process: the department of energy is generally not open to international actors as participants in the energy sector policy process. Other actors, such as the ministry of environment, and the Presidential climate commission are much more in favour of this, albeit they acknowledge possible downsides: donor-driven policy ideas, e.g. on the choice of policy instruments, paradigmatic ideas like the privatisation versus the public steering of the energy sector, or stifling reporting obligations, including on a number of SDG related elements.

On the political level of the JETP negotiations, and for that matter, also in the case of already ongoing international cooperation and support by donors for the energy sector of South Africa, agreements between governments on support for an energy transition can be forged. The JETP political declaration of 2011 or bilateral agreements on cooperation between donors and the South African government serve as examples. However, on working levels of the

implementing agencies and their South African counterparts, the objectives and contents of the agreed cooperation are much more contested. This means, agreements on cooperation and support are taken on intergovernmental levels but are contested in terms of ownership during implementation. A reason for this situation - based on interview results - is that the political level does not count in resources to do the intelligence work and analyse and understand the situation to the degree which would be necessary. Instead, it is driven by normative motivations of climate protection and sustainable development, which are however by no means clear on the implementation level and for the sectoral political and policy processes.

To summarise, this paper identifies the IPG - and specifically, the international donor representatives - as an actor in the domestic energy sector policy process, which however is not formally acknowledged or legitimised by the South African political system. Furthermore, it does not count with sufficiently developed polity and political venue, especially on the political level of the embassies and international relations actors.

The question arises whether a role for international donors and their agencies in the domestic just energy transition process of South Africa is a desired and legitimised option? This is a fundamental question, which needs to be addressed in the political reality of international relations, but which has not been given appropriate consideration. Accordingly, the acknowledgement and legitimacy of the JETP as an international political process is an important step towards an institutional framework, in which the subsequent factors might become active. These are presented in the following section. In essence, the identified challenges of a transnational political process could be addressed, if a path towards stronger institutionalization of rules of the game between donors and recipients are taken.

2. Exploring JETP cooperation factors and cooperative modalities

The analysis of the interview findings allowed us to identify a set of factors, which appear to be necessary as preconditions for the JETP implementation in South Africa. In the following, these factors are formulated as propositions, in order to do justice to the early stages of JETP development in South Africa.

Reciprocate trustful behaviour. The literature on cooperation in the global climate commons identifies mutual trust of actors seeking collaboration as an important factor for successful cooperation (Ostrom, 2010; Carattini et al., 2019). This is because outcomes of global climate cooperation (mitigation and adaptation effects) can be achieved and sustained if co-operators believe that the other actors involved are trustworthy partners. According to Carattini et al. (2019, p.228) "cooperative outcomes can be sustained if stakeholders trust each other, and trust is maintained through monitoring and the sanctioning of norm violators". Trust is an indispensable auxiliary factor for successful cooperation.

The interviews have revealed that trust between donors and recipients is a major issue: Parties involved do not trust each other generally. However, as interviewees (international community and academia) stated, trust improved over time because of regular communication and exchange of information. An interviewee from a donor agency characterised the state of the JETP negotiations as a "chicken and egg" situation of international climate finance:

- The South African stakeholders ask from the donors that there should first be disclosure of the financing types, modalities, and instruments before speaking about the actual investment plan.
- The donors ask from the South African side to first disclose the investment plan and policy reforms plan, before they are willing to disclose the type of financing.

Areas of the JETP negotiations where trust becomes an issue are described in the following section. The following trust-inhibiting factors were identified. South African stakeholders are uncertain over the strings attached to finance: will non-concessional finance lead to new indebtedness? Will there be new and additional finance after all, or rather relabelled finance, i.e., funds which were previously allocated for other purposes, but now labelled as JETP funding? Furthermore, this stakeholder group is uncertain over the donors' "true agenda": are they trying to find inroads into domestic electricity markets to advance foreign direct investment by privatisation pushes?

The donors, on the other side, question whether the South African side will implement as described in broad strokes in the 2021 political declaration on the JETP. Will the just energy transition be at risk due to social upheaval? Is there a risk of misusing the transferred funds, or in other words, will the JETP be a safe investment for them, considering reporting obligations, domestic audits, and accountability towards the general public as source of the finances?

It is noticeable that the perceptions on the negotiation process differ between South African interviewees and those from the international community. While the former tend to state that positions are far from each other, the latter group generally states that it wishes to attend to the objectives of the South African side as much as possible. Areas of differences are that donors allegedly do not wish to fund the social justice parts of the JETP but are interested in investable projects such as power generating projects. Further differences are that donors wish the energy transition to be ambitious and transformative, an area which may extend well into political decision-making levels, while claiming that the draft investment plan draws too much on existing plans and programs - contrary to expectations of paradigmatic changes induced by programs going beyond existing documents.

Concerns over trust were never expressed in the interviews as personal, but rather institutional, an aspect which will be addressed under item *Agreements of rules-in-use* (institutionalisation) below. Interviewees pointed out two options to improve the trust issue.

- "Show, don't tell". Enhancing the transparency over what the donors are able to contribute, and under which conditions, appears crucial to enhance trust. On the other hand, if South African stakeholders are open about risks, threats, and opportunities of the JETP, this will also contribute to trust building.
- Frequent communication over a sufficient period. Experience in the South African case has shown that trust improved over time due to ongoing communication and exchange of viewpoints and information about one's plans and ideas. This is particularly interesting as it takes place against the backdrop of a country, where, historically, very little experience with foreign loans exists, and prejudices and suspicions influence the opinions of stakeholders. Based on interviewees, this situation gradually improved over time due to regular communication.

Shared norms and understandings. The term norm is typically used "to describe collective expectations for the proper behaviour of actors with a given identity" (Katzenstein, 1996: 5). Norms are thus crucial in shaping human behaviour and interactions. Kinzig et al. (2013) argue that there is an intrinsic interplay between norms – needed to address global environmental problems and alter individual and social behaviour towards protection of the commons – and policy making. On the complex terrain of climate change mitigation, norms have two functions: i) to orient action, and ii) to serve as a benchmark for the adequacy of action (Herz, 2019).

The method of semi-structured interviews and qualitative, in-depth case study research has proven of limited effectiveness in relation to the assessment of this particular factor, as a norm is internalised over large parts of a population, and the interviewees gave experts opinions, but cannot replace a full-fledged survey. It was generally found that norms of climate change mitigation are not very widespread beyond a small group of actors dealing with the topic (source needed). In particular, the general population, which plays a big role for the success or failure of a just transition, is not yet anywhere near accepting such norms. In a recent study, Roberts et al. (2023) found that South Africans had a lower awareness of climate change and were also less likely to believe in it compared to the European average. This comes apparently into effect when considering consumer choices, such as decisions for or against electricity purchase from renewable energy sources or choosing a sustainable means of transport (donor interviewee). This domestic level of low norm internalisation seems to stand in contrast with the global level in which the JETP was originally announced. Norms of climate neutrality and the recognition of developmental aspects of energy transitions are much more widespread at the global level with more than 137 countries having or intending to have a climate neutrality target (Net Zero Tracker, 2022). This widespread recognition of climate neutrality likely aided the agreement on the JETP during the 26th COP of the UNFCCC in Glasgow 2021. Yet, arriving at local norm diffusion is not straight forward. Acharya's framework of norm localisation illustrates how the adoption of global norms at the domestic level is a complex and dynamic process through which local actors engage with and modify the norm in question (2004). This multifaceted process leaves many gaps with regards to political decision-making and collective behaviour. Big gaps exist in terms of international norm dissemination and domestic internalisation of such norms to create an impact and to serve as guidance for political decision making and collective behaviour.

An option to promote the internalisation of climate neutrality and justice norms is through support of local norm entrepreneurs. According to Acharya, one of the conditions which favours norm localisation is the presence of credible local entrepreneurs who are able to reframe the external norm such that its value is recognized by the local audience but are at the same time seen as "upholders of local values and identity" (2004, p. 248). These local actors can be important in the context of the JETP process, for instance through social media campaigns and messaging on green electricity choices. Two aspects are important in this context: one is that there are usually competing norms - such as the perception that coal is a domestic good and should receive societal support ("Coal as a local hero", interviewee from a think tank), even if economically not useful in the long-term. Second, it is a question whether donor support for norm entrepreneurs is considered politically acceptable.

Conducive modalities of finance instruments. "South African stakeholders want as little conditionalities as possible, and as much grant finance as possible. The donors want it the other way round, including that the JETP be as ambitious as possible." This is a statement by an interviewee who acted as an observer to the negotiations, and which may well sum up the juxtaposing positions. Conditionality refers to "the strings attached" to international finance provided by donors, i.e., the types of activities that the finance can be spent on, what objectives it should have and which indicator achievements it should target (World Bank, 2005).

Despite the early stages of the negotiation process, a few things may be said, which characterise the process. Historically, South Africa refrained from accepting foreign loans for the energy sector. Due to fears of indebtedness, it maintained a critical stance, which was also converted into national law, which prohibited the acceptance of loans after the end of the Apartheid in 1994. Hence there have been very few loans in the South African energy sector, with the notable exception of the World Bank-funded loan for Eskom and the Medupi coal-fired power plant. This project was criticised by academics and NGOs for not being successful and having detrimental environmental impacts (The Guardian, 2010; BrettonWoods observer, 2019, confirmed by academia). According to interviewees from both think tanks and the public sector, these historic roots instilled a sense of scepticism which is noticeable in the negotiations.

Among interviewees, there were different opinions about effectiveness, usefulness, and possible side effects of conditionality.

- 1. "Through the backdoor, a new form of carbon colonialism is introduced": Conditionality as a tool for superimposing foreign agendas on the global south.
- 2. "We are not living in the eighties anymore": South Africa holds ownership over the type of conditionalities as the country is negotiating from a position of strength.
- 3. Conditionality simply does not work": Conditionality is not very harmful, but basically ineffective.

Which of the above would apply in the reality of the JETP in South Africa? There is a consensus among the donors that conditionality should apply, but there are different opinions in regards to the stringency of conditionality. One opinion is that the leverage of conditionality to influence political decision making in favour of a just energy transition is dependent on the amount of finance provided: the higher the amount, the higher the leverage. However, it was also recognized that the 8,5 bn USD are just too small to have such effects.

The history of conditionality of finance instruments shows very mixed results. It is commonly acknowledged that a crucial condition is shared ownership over the proposed measures and objectives (World Bank, 2005; Sippel & Neuhoff, 2009). Sippel & Neuhoff (2009) argue that conditionality of climate finance is fundamentally different to past lending operations such as, for instance, structural adjustment programs by Bretton Woods institutions. They argue that there no longer is a situation in which an International Finance Institution (IFI) superimposes a foreign economic paradigm on a developing country in dire need of finance. Furthermore, they argue that recipient countries choose climate policies at their own discretion. Yet, the precarious debt situation of Eskom calls these arguments into question - the resulting need for finance might reinstate fears of indebtedness and in its course, less than voluntary choices of climate policy instruments. This is stated in many of the interviews with South African stakeholders. They believe that the financial situation is used by donors, who create inroads into the energy sector of South Africa and open doors for foreign direct investments, thereby causing disadvantages to the domestic economy. This debate is based on subjective opinions, suspicions, and assumptions because of the lack of evidence in the real-world policy process at the time of writing. However, they influence the JETP negotiating positions in an indirect way henceforth should be taken seriously. Indirect means, the above-mentioned sentiments and suspicions are possibly reflective of a wider spectrum of the population, and influence political decision making, and also the IPG-led process. Donors did not clearly counteract these arguments, but stated in interviews "Doesn't everybody have interests?" (donor representative) or expressed understanding of the South African situation and history of colonialism.

There is however another argument, which renders the application of conditional finance instruments complicated. If the main preconditions are ownership by recipient countries and

alignment of donor mechanisms and partner country conditions, then the question arises, which domestic institution or actor group holds ownership and over which part of the process of a just energy transition? A related question is: with which institutions and instruments should donors align their mechanisms? These are pertinent questions, as the JETP implies a sectoral transformation with society wide implications and effects, requiring the collaboration of multiple political, private, and civil actor groups. A just transition process is likely not going to be a linear, or plannable process, as decisions over the course of action are the result of political discourse, negotiation, and deliberation. The overall question then is: can conditionality, if agreed upon prior to the commencement of a just energy transition process, pre-empt or anticipate future decisions over a course of action? Given that the political decisions over the course of action in the energy sector are not yet taken - positions range from defending the use of coal over to a complete phase out and development of renewable energy - alternatives to conditionality might be recommended. Such alternatives need to be flexible, possibly supporting policy advocacy groups, to stay close to the course of political action, and above all, require that international actors from donors and related agencies are acknowledged as actors in a political process.

The EU, in particular the accession of the eastern European states to the union, is a prominent case of successful conditionality of finance instruments, as observed by Novikova et al. (2020). Their analysis confirms the importance of having a common political objective and a set of shared norms and values such as economic development and social cohesion in order to voluntarily comply with conditionality.

To summarise, this section argues that conditionality of finance instruments might not be a very useful approach in a highly volatile and dynamic political process with uncertain outcomes, as it presupposes that financial contributions would influence political decision making. This is not to say that conditionality cannot work in all circumstances, but examples such as the EU conditionality show that this needs a level of international institutionalisation, which is not yet developed for the JETP.

Agreements of rules-in-use (institutionalisation). Addressing the preceding question also implies to set in motion a process of political institutionalisation of an intended cooperation, i.e., taking agreements of rules-in-use, which participants apply when engaging in decision making processes (Ostrom, 2011). The definition by Kamrava (2012) refers to political institutionalisation as "the establishment, arrangement, and codification of the various institutions of the states, often through constitution-making or another constitutional mechanism. The state develops a set of "rules of the game", a code of conduct which may be implicit in its behaviour or may be explicitly spelled out in a constitution or in another official document of the same sort." (p.37).

A look into what has been institutionalised and in which form this was done between international donors and South Africa may be instructive. The general institutions, which span

across global north and south, are notoriously weak in terms of providing frameworks for rules on joint decision making across jurisdictions (see also Lüpke, Neuhoff & Marchewitz, 2022). The existing ones, such as multilateral agreements like the Paris Agreement, are built around voluntary contributions (NDCs) and hence a strongly decentralised system, are strong in conflict resolving mandates but highly specific (e.g., WTO) or bilateral agreements such as for trade partnerships or for development cooperation (see Table 4 below for those between South Africa and the EU).

Table 4. Overview of trade and development partnerships between South Africa and the EU.

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Name	Year	Area / Stated intent	Involved parties
South Africa-EU Trade, Development and Cooperation Agreement (TDCA)	1999	Trade, development and cooperation The agreement constitutes the legal basis for cooperation between South Africa and the EU.	South Africa and the EU
South Africa-EU Strategic Partnership Joint Action Plan (JAP)	2007	The partnership provides a strategic framework for cooperation, and aims to promote liberty, peace, prosperity, security and stability.	South Africa and the EU
Southern Africa Development Community – European Partnership Agreement (SADC-EPA)	2016	Trade The partnership supplants the trade aspect of the TDCA.	South Africa, the EU, Botswana, Lesotho, Mozambique, Namibia and Swaziland

Note. Adapted from The Agreement on Trade, Development and Cooperation, 1999; The South Africa European Union Strategic Partnership Joint Action Plan, 2007 and The Economic Partnership Agreement, 2016.

The overview provided in Table 4 is useful in that it sheds light on the underlying cooperation framework between South Africa and the EU, one of its main partners in the JETP. The legal foundations of this framework, into which the JETP negotiations are currently inscribing themselves, was set decades ago with the TDCA (1999). Over the following years, the

cooperation structure was continuously updated and enlarged, for example to include the SADC-EPA and thereby deepen the trade aspect of the initial agreement. In particular, the addition of the South Africa-EU Strategic Partnership (EU, 2007), has allowed to unite all dialogue formats in all cooperation areas under one umbrella. There is thus an acquaintance, not only between the highest political levels of the two parties, but also on sectoral levels throughout society (Landsberg & Hierro, 2017).

In addition to this, the EU has established a Multi-Annual Indicative Programme (MIP) for 2021 through to 2026, in which the main priority areas for cooperation are clarified (Republic of South Africa: Multi-Annual Indicative Programme 2021-2027, n.d.). The MIP also states the key policy documents, both for South Africa and the EU, along which the EU determines its strategic orientation. Among others, these include South Africa's National Development Plan, its NDC and its Economic Reconstruction and Recovery Plan, as well as the EU's 2030 Agenda, the European Green Deal and the Paris Agreement.

A priori, the JETP thus inserts itself into a rather well-established strategic framework. It is, however, worth noting that this framework is not perfect. This can be seen in the fact that the 'annual summits' at the highest political level, which were initially announced in the JAP, stopped occurring on a regular basis after 2013 (South African Institute of International Affairs, 2018). Landsberg & Hierro (2017) nevertheless argue that this rupture of apparent collaboration on the international scene did not prevent the institutionalisation of cooperation on the operational level. Indeed, while cooperation was crumbling on the international scene, independent collaboration elements have evolved on the implementation level. This coincides with interviewees' statements that there was no lack of trust per se, but rather a lack of trust on an institutional level. The lacking involvement of the operational level in the JETP negotiations of course did not help, as this was the level on which trust was truly established. It hinders the agreement on rules-in-use with clearly defined responsibilities on all levels, as the actors with the most knowledge about previous cooperation are left out of the negotiations.

Conclusions

Informed by existing theories which explain global cooperation in the climate commons, the study firstly confirms the JETP as a transnational policy process. Secondly, it identifies a preliminary set of factors, which shape cooperative outcomes of the JETP in South Africa. These are:

- 1. Reciprocity of trust in international cooperation
- 2. Shared norms and understanding of JETP
- 3. Alternatives to use of conditional financial instruments by donors
- 4. Institutionalisation of rules-in-use for the JETP

The study results in the following overall conclusions:

Paradigmatic change instead of marginal change as desired JETP outcomes implies a rethink of international cooperation approaches. International support to a just energy transition implies the support to a transformation of a sector with society-wide implications of a whole country on economics of energy, social dimensions, and environmental aspects. This implies not only a marginal change process, but a paradigmatic change process, including scale and speed of energy transition, fundamental directions on the role of the private sector and shifts in income structure and employment of the concerned population.

ODA principles of country ownership and alignment are good starting points but need to be extended. The case of the JETP in South Africa shows that such transitions are complex, public processes, involving a range of actors. Furthermore, they are non-linear due to the profound uncertainty surrounding political outcomes. The highly polarised and fragmented political process of the just energy transition also questions two core principles of ODA, i.e., country ownership and alignment of donor mechanisms with recipient country systems and mechanisms. This is because the ownership for the JETP rests currently with only a fraction of the groups which are engaged in the political discourse and decision-making process. Ownership over specific parts of the process remains a contentious topic, unlike the global agreement on a JETP, which was decided by international actors. The latter are driven by normative concerns for the climate and sustainable development. In a similar vein, alignment and use of recipient country systems and mechanisms raises questions on the choice and adequacy of the current mechanisms.

Acknowledging the existence of a transnational political process of the JETP and legitimise international actor participation therein. The case study has shown that a JETP process is inherently political if a paradigmatic change process is intended. If there is a general agreement on the ambition level of the JETP such as taken during UNFCCC COP28, but there is dispute over the design of specific policies then there is a high probability that international actors are beginning to play political roles. The question arises however, if such actors are regarded as legitimised participants in such a transnational political process. In such cases, international and national participants should double their efforts to create rules for decision

making for the JETP - not as a single donor project - but for the just energy transition of South Africa in the wider context. The current institutional framework is assessed as insufficient. Weaknesses of such frameworks are poorly understood and exist in a sensitive environment between donors, their implementing agencies, and the South African government.

Exploring alternatives to conditionality-based finance instruments is a worthwhile endeavour. Given the political nature of the JETP and the uncertain decision-making processes, the question needs to be raised whether conditionality is an effective approach for the JETP. The interview evidence points in other directions: Considering both the minor importance of financial contributions by donors as a factor in the political decision-making process, and the nonlinearity of the political JETP process, alternatives to conditionality might be better-suited. In this regard, and presupposing that international actors are legitimised in the transnational political process, more flexible approaches such as support to policy advisory groups, non-state actors, media and academia might be useful in addition to financial support. This would imply that a possible decoupling between financial contributions (once political decisions allow to allocate such finance) and support to political and policy processes may be conducive effective JETP support. However, the dimension of institutionalisation of rules-inuse should not be underestimated, considering the wide-spread fears of foreign influence seeking and neo-colonialism in South Africa.

Learning from other transnational institutionalisation processes of rules-in-use such as the EU might provide valuable lessons learned for the JETP. As the case of EU finance support to newly accessed eastern European countries show, a general agreement on political goals, norms, and values between source actors and recipients should precede the allocation of financial support and is effective as a framework to allow for effective implementation of such funds.

Literature

Acharya, A. (2004) 'How ideas spread: Whose norms matter? Norm localization and institutional change in Asian regionalism', *International Organization*, 58(2), pp. 239–275. Available at: https://doi.org/10.1017/S0020818304582024.

Aklin, M. and Mildenberger, M. (2020) 'Prisoners of the Wrong Dilemma: Why Distributive Conflict, Not Collective Action, Characterizes the Politics of Climate Change', *Global Environmental Politics*, 20(4), pp. 4–27. Available at: https://doi.org/10.1162/glep_a_00578.

Ayamolowo, O.J., Manditereza, P.T. and Kusakana, K. (2022) 'South Africa power reforms: The Path to a dominant renewable energy-sourced grid', *Energy Reports*, 8, pp. 1208–1215. Available at: https://doi.org/10.1016/J.EGYR.2021.11.100.

Bernauer, T. *et al.* (2016) 'Unilateral or Reciprocal Climate Policy? Experimental Evidence from China', *Politics and Governance*, 4(3), pp. 152–171. Available at: https://doi.org/10.17645/pag.v4i3.650.

Bhandary, R.R., Gallagher, K.S. and Zhang, F. (2021) 'Climate finance policy in practice: a review of the evidence', *Climate Policy*, 21(4), pp. 529–545. Available at: https://doi.org/10.1080/14693062.2020.1871313.

Blondeel, M. (2020) 'Net-zero – A new international norm?', *UKERC*. Available at: https://ukerc.ac.uk/news/net-zero-a-new-international-norm/.

Bretton Woods Project (2019) *Spring 2019 - Bretton Woods Project*. Available at: https://www.brettonwoodsproject.org/publications/spring-2019/ (Accessed: 17 October 2022).

Carattini, S., Levin, S. and Tavoni, A. (2019) 'Cooperation in the Climate Commons', *Review of Environmental Economics and Policy*, 13(2), pp. 227–247. Available at: https://doi.org/10.1093/reep/rez009.

Gach, E. (2019) 'Normative Shifts in the Global Conception of Climate Change: The Growth of Climate Justice', *Social Sciences*, 8(1), p. 24. Available at: https://doi.org/10.3390/socsci8010024.

Hale, T. (2020) 'Catalytic cooperation', Global Environmental Politics, 20(4), pp. 73–98.

Hanto, J. et al. (2022) 'South Africa's energy transition – Unraveling its political economy', *Energy for Sustainable Development*, 69, pp. 164–178. Available at: https://doi.org/10.1016/j.esd.2022.06.006.

Herz, S. (2019) 'Paris Is Not Enough: Why the Paris Agreement Isn't Driving More Climate Action...and How It Could'. Rochester, NY. Available at: https://doi.org/10.2139/ssrn.3487942.

Katzenstein, P.J. (1996) *The Culture of National Security | Columbia University Press*. Edited by K.P. J. Columbia University Press. Available at: http://cup.columbia.edu/book/the-culture-of-national-security/9780231104692.

Kamrava, M. (2008) *Understanding comparative politics : a framework for analysis*. Routledge. Available at: https://www.routledge.com/Understanding-Comparative-Politics-A-Framework-for-Analysis/Kamrava/p/book/9780415773058.

Kinzig, A.P. *et al.* (2013) 'Social Norms and Global Environmental Challenges: The Complex Interaction of Behaviors, Values, and Policy', *Bioscience*, 63(3), pp. 164–175. Available at: https://doi.org/10.1525/bio.2013.63.3.5.

Landsberg, C. and Hierro, L. (2017) 'An overview of the EU–SA Strategic Partnership 10 years on: Diverging world views, persisting interests', *South African Journal of International Affairs*, 24(2), pp. 115–135. Available at: https://doi.org/10.1080/10220461.2017.1343681.

Lüpke, H. von, Neuhoff, K. and Marchewitz, C. (2022) 'Bridges over troubled waters Climate clubs, alliances, and partnerships as safeguards for effective international cooperation?' Available at: https://www.diw.de/documents/dokumentenarchiv/17/diw 01.c.854706.de/snapfi report bridges over troubled water 26092022.pdf.

McGrath, L.F. and Bernauer, T. (2017) 'How strong is public support for unilateral climate policy and what drives it?', Wiley Interdisciplinary Reviews: Climate Change, 8(6), p. e484.

Mungai, E.M., Ndiritu, S.W. and Da Silva, I. (2022) 'Unlocking climate finance potential and policy barriers—A case of renewable energy and energy efficiency in Sub-Saharan Africa', *Resources, Environment and Sustainability*, 7, p. 100043. Available at: https://doi.org/10.1016/J.RESENV.2021.100043.

Nakhooda, S. *et al.* (2014) 'Climate finance: is it making a difference? A review of the effectiveness of multilateral climate funds'. Available at: https://odi.org/en/publications/climate-finance-is-it-making-a-difference-a-review-of-the-effectiveness-of-multilateral-climate-funds/ (Accessed: 12 October 2022).

Newell, P. and Bulkeley, H. (2016) 'Landscape for change? International climate policy and energy transitions: evidence from sub-Saharan Africa', 17(5), pp. 650–663. Available at: https://doi.org/10.1080/14693062.2016.1173003.

Net Zero Tracker (2022) *Net Zero Tracker | Welcome*. Available at: https://zerotracker.net/ (Accessed: 17 October 2022).

Nordhaus, W. (2015) 'Climate Clubs: Overcoming Free-riding in International Climate Policy', American Economic Review, 105(4), pp. 1339–1370. Available at: https://doi.org/10.1257/aer.15000001.

Nordhaus, W.D. (2017) 'Revisiting the social cost of carbon', *Proceedings of the National Academy of Sciences*, 114(7), pp. 1518–1523.

Novikova, A. (no date) Lessons learned for international climate policy from the programming, implementation, and monitoring of the European Structural and Investment Funds in EU Member States – IKEM. Available at: https://www.ikem.de/en/publikation/novikova2020/ (Accessed: 17 October 2022).

Ostrom, E. (2010) 'Beyond markets and states: polycentric governance of complex economic systems', *American economic review*, 100(3), pp. 641–672.

Ostrom, E. (2011) 'Background on the Institutional Analysis and Development Framework', *Policy Studies Journal*, 39(1), pp. 7–27. Available at: https://doi.org/10.1111/J.1541-0072.2010.00394.X.

Ostrom, E. (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press. Available at: https://doi.org/10.1017/CB09780511807763.

Republic of South Africa and European Union (1999) *Agreement on Trade, Development and Cooperation*, 311.

Sippel, M. and Neuhoff, K. (2009) 'A history of conditionality: lessons for international cooperation on climate policy', *Climate Policy*, 9(5), pp. 481–494. Available at: https://doi.org/10.3763/cpol.2009.0634.

South African Government (2022) *President Cyril Ramaphosa appoints Mr Daniel Mminele as Head of the Presidential Climate Finance Task Team | South African Government*. Available at: https://www.gov.za/speeches/president-cyril-ramaphosa-appoints-mr-daniel-mminele-head-presidential-climate-finance-task (Accessed: 17 October 2022).

The World Bank (2005) *Review of World Bank Conditionality*, pp. 1–397. Available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/228751468134390047/review-of-world-bank-conditionality (Accessed: 17 October 2022).

European Union (no date) Republic of South Africa: Multi-Annual Indicative Programme 2021-2027.

G7 (2022) *G7: Summit outcomes at a glance | G7 Germany 2022*. Available at: https://www.g7germany.de/g7-en/current-information/g7-summit-outcomes-2058314 (Accessed: 17 October 2022).