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A New “Green Grab”? A Multi-Scalar Analysis of  
Exclusion in the Lake Turkana Wind Power  
(LTWP) Project, Kenya

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## Abstract

This thesis explores how the “exclusion” of local communities from land has been justified and legitimised in the Lake Turkana Wind Power (LTWP) project in Kenya. By adopting a multi-scalar lens, this thesis both identifies the international, national and local actors involved in the project and analyses how these actors invoke different conceptions of scale in their legitimising narratives. Through a discourse analysis, this thesis finds that the actors form several discourse coalitions that both appeal to and construct the global, national and local level in certain ways. These discourses both render invisible current users of the land and serve to undermine local level resistance by presenting it as a barrier to collective global and national benefits.

Keywords: large-scale land acquisitions, land-grabbing, large-scale renewable energy projects, multi-scalar, discourse analysis.

## List of Abbreviations

AfDB: African Development Bank

CDM: Clean Development Mechanism

CLO: Community Liaison Officer

DA: Discourse analysis

DEG: Deutsche Investitions und Entwicklungsgesellschaft

EIB: European Investment Bank

FinnFund: The Finnish Fund for Industrial Cooperation

FMO: Netherlands Development Finance Company

FPIC: Free, Prior and Informed Consent

GoK: Government of Kenya

IFU: Danish Investment Fund for Developing Countries

IWGIA: International Work Group for Indigenous Affairs

LSLA: Land-scale land acquisitions

LTWP: Lake Turkana Wind Power

MDNKAL: Ministry of Development of Northern Kenya and Arid Lands

MEMR: Ministry of Environment and Mineral Resources

MEP: Ministry of Energy and Petroleum

NGOs: Non-governmental organisations

Norfund: The Norwegian Investment Fund for Developing Countries

UNFCCC: United Nations Framework Convention on Climate Change

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## 1. Introduction

“Land is undoubtedly the most important natural resource in Africa. Its importance transcends economics into a breadth of social, spiritual, and political significance” (Alao, 2007:63).

As in other countries, Kenya is experiencing an increase in large-scale renewable energy projects. These projects now account for 21 percent of all large-scale land acquisitions (LSLA) in Kenya and this figure is expected to continue rising (Land Matrix, 2020). At the international and national scale, these projects are celebrated as “solutions” to climate change, energy insecurity and rural development (Brown et al, 2012). At the local scale, however, such projects are often highly contested and eschewed in accusations of corporate and government malpractice (Avila-Calero, 2017).

In particular, critical geographers and anthropologists highlight the land-intensive nature of large-scale renewable energy projects and how many of them are placed in marginalised areas in the global peripheries (Newell and Mulvaney, 2013). As McCarthy (2015:2486) notes, “the creation of renewable energy geographies...would involve major new productions of space that would disproportionately affect rural areas where existing users often have less power and fewer formal land rights”. Consequently, global desires for renewable energy have to be coupled with social justice concerns (Yenneti, Day and Golubchikov, 2016).

In Kenya, the above trends are apparent. As the International Work Group for Indigenous Affairs (2015:11) observes, “there is a large overlap between renewable energy projects and indigenous peoples’ territories in Kenya”. Indeed, the Lake Turkana Wind Power (LTWP) project – which is the largest windfarm in Sub-Saharan Africa and Kenya’s biggest private investment – is situated in Marsabit County in Northern Kenya, an area that is home to indigenous groups that have long suffered from marginalisation (Klopp, 2000). Relatedly, LTWP has faced accusations of dispossession and “land grabbing” by both local communities and human rights organisations (Sena, 2015; Voller et al, 2016; IWGIA, 2020).

This study focuses on “exclusion” in LTWP through a multi-scalar lens. It adopts this approach because international, national and local actors all play an important role in both the promotion of renewable energy and in the outcomes of the project. In particular, this thesis aims to answer the following question:

*How has the acquisition of land and the “exclusion” of local communities been legitimised by international and national actors in the LTWP project?*

To answer this question, this thesis is guided by the following sub-research questions:

1. What international, national and local actors are involved in the LTWP project?
2. How have international and national actors justified exclusion and what are the main “discourse coalitions” that emerge?
3. How have local communities responded to LTWP and other actors’ legitimising discourses?

This thesis is guided by Hall, Hirsch and Li’s (2011) “powers of exclusion”. It adopts their definition of exclusion as “the ways in which people are prevented from benefiting from things” (ibid:7) – in this case land – and focuses on the power of legitimations which are understood as “justifications of what is or of what should be and appeals to moral values” (ibid:18). In addition, this study also considers how actors at the local level have responded to these legitimising discourses. This is because although “legitimations are powerful...they are never unopposed” (Hall et al, 2011:19).

Furthermore, this thesis is also informed by theoretical insights from studies on multi-scalar approaches and notions of discursive scale-making (Brown and Purcell, 2005). In particular, it pays attention to how international and national actors invoke different conceptions of scale in their legitimising discourses. Thus, this thesis adopts a multi-scalar approach in two-ways. Firstly, it unearths the international, national and local actors involved in LTWP and it considers the discursive process of scale-making.

Through discourse analysis, this thesis finds that actors discursively move between scales to frame their legitimising arguments. International and national actors have formed several discourse coalitions that appeal to and construct global, national and local scales. Collectively, these discourse coalitions promote scalar arrangements that are beneficial to the promoters of LTWP and serve to legitimise both the acquisition of land and the exclusion of local communities.

This thesis is structured as follows. Firstly, section 2 reviews the literature on LSLA and energy transitions. Section 3 presents the theoretical and methodological framework. Section 4 situates LTWP in its historical and political context. Section 5 begins with a discussion of the international,

national and local actors involved in the project and then considers the discourse coalitions that emerge between international and national actors and local level responses to LTWP. Finally, the study is concluded and its broader implications are discussed.

## 2. Literature Review

### 2.1 Land-Scale Land Acquisitions

This thesis is informed by literature on LSLA in the Global South, critically termed “land grabbing” (Borras et al, 2011). This strand of literature offers three major insights.

Firstly, this literature highlights the importance of legitimisation processes and the variety of tools that powerful actors use to assign new meanings to land. Li (2014:589), for example, argues that “to turn land to productive use requires regimes of exclusion that distinguish legitimate from illegitimate uses and users”. Additionally, as Hall et al (2011:7) show, “powers of exclusion” operate through the interaction between regulation, force, the market, and legitimisation. Legitimation, which is the primary focus here, provides the foundation for regulatory, forceful and market powers (Hall et al, 2011:18)

Consequently, discourses function as a key tool through which legitimate uses and users are created. Indeed, numerous scholars have highlighted various discourse strands. With regards to agribusiness, Galaty (2014:80) identifies three “justificatory narratives” used across East Africa by investors and national governments – namely, the global food crisis, the availability of land, and farmers’ unproductive methods – which are used to legitimise dispossession. Similarly, many scholars show how powerful actors perpetrate colonial notions of “marginal” land that is “underutilised” by existing users (Nalepa and Bauer, 2012; Makki, 2014).

In addition, the literature on “green grabbing”, where land is acquired for environmental ends such as conservation, biofuels and carbon off-setting, also rides on legitimising discourses (Fairhead et al, 2012:237). Hunsberger et al (2017), for example, show how global claims of climate change are used to justify and de-politicise the dispossession of local communities in REDD+ and biofuel projects. Indeed, such projects are often embedded in visions of “ecological modernisation” which assumes that economic growth and environmental protection complement one another (Fairhead et al, 2012).

The second insight comes from political economy studies on LSLA that criticise the overt focus on international actors and the subsequent neglect of the role that states and domestic elites play in land deals (Wolford et al, 2013; Cotula et al, 2014; Keene et al, 2015; Borras et al, 2019). Borras and



Franco (2013:1728) explain how states facilitate LSLA through five processes which include (1) justification; (2) the reclassification of marginal lands; (3) the identification of these lands; (4) the acquisition of land; and finally (5) the transfer of land to investors. However, as Wolford et al (2013:189) caution, states “never operate with one voice”. Instead, states seek both capital accumulation and political legitimacy and consequently they often play a dual role as promoters and preventers of LSLA (Fox, 1993; Harvey, 2005). Thus, scholars emphasise the need to detangle the state (Hall et al, 2015).

The third insight comes from critical agrarian studies that highlight the variety of “political reactions from below” to LSLA (Borras and Franco, 2013). These studies move us beyond simple understandings of either resistance or accommodation and encourage us to explore the potential for several different responses at the local level (Oya, 2013) and the potential for transnational connections which can amplify local resistance (Hall et al, 2015). A key concern for local communities is often their terms of inclusion and their ability to benefit from projects. Thus, many individuals seek better incorporation into projects and compete with each other for benefits (Larder, 2015). This can result in what Borras and Franco (2013:1729) have termed “poor people versus poor people” conflict whereby groups at the local level present competing claims to entitlements. Furthermore, these studies also speak to another element of Hall et al’s (2011) “powers of exclusion” that states how although “legitimations are powerful...they are never unopposed”, therefore, “the effort to justify any particular form of exclusion must always be seen as a struggle” (Hall et al, 2011:19).

Relatedly, as Borras et al (2012:412) state, the literature on LSLA is full of terms such as “local communities” but such homogenous categories fail to consider how impacts and responses vary according to class, gender and generational dynamics (Hall et al, 2015). With regards to class, landed-elites at the local level often welcome LSLA and see them as opportunities for capital accumulation (Greiner, 2016).

The literature on LSLA, therefore, offers numerous insights but it nevertheless remains confined predominantly to the study of agricultural projects and extractive industries. Consequently, as McCarthy and Thatcher (2019:242) note, large-scale renewable energy projects are an “important but under-researched component of the global land rush”. Large-scale renewable energy projects, however, present their own conundrums. Therefore, for analytical depth, the literature on LSLA has to be supplemented with insights from the literature on energy transitions.

## 2.2 Large-Scale Renewable Energy Projects and Energy Transitions

Although economists emphasise the benefits of large-scale renewable energy projects due to their ability to promote economic growth at the national and local level whilst also mitigating environmental damage (Brown et al, 2012; Oji et al, 2016), critical geographers and anthropologists take a more nuanced view.

In particular, they emphasise how the land-intensive nature of large-scale renewable energy projects necessitates a consideration of space and territory (Bridge et al, 2013; McCarthy, 2015). As Huber (2015:36) notes, renewable energy “requires huge amounts of space and territory to generate the energy that with fossil fuels is simply extracted from a ‘hole’”. Consequently, new imaginations of space emerge as McEwan (2017) has shown, for example, in South Africa where the country’s energy transition requires the simultaneous creation of new territories and the discursive erasure of land in government discourses.

In addition, the related literature on just energy transitions (Sovacool et al, 2017) highlights both the adverse impact of renewable energy projects on marginal communities and how the placement of projects is laden with power relations. As Newell and Mulvaney (2013:133) argue, the “uneven exposure to environmental benefits and harm is often not accidental and unintentional” but is instead a product of unequal power relations both within and between countries. Indeed, as Rignall (2016) shows in Morocco, the construction of a large-scale solar project has relied upon land tenure regimes that are inseparably tied to a history of dispossession.

This branch of literature also draws attention to “unjust energy discourses” (Sovacool et al, 2017:686) which are used by powerful actors to evade questions of potential injustice. For example, scholars note how science-policy discourses function as a means of relocating global concerns to peripheral areas in the Global South (Fairhead et al, 2012). The dangers of global climate change and energy security, thus, function as powerful moral justifications for exclusion in marginal areas (McCarthy and Thatcher, 2019). This process is often facilitated by claims of expert knowledge (Forsyth, 2003) and the “rendering technical” (Li, 2007) of problems and solutions which serves to de-politicise the process (Tanner and Allouche, 2011). Indeed, this is what Swyngedouw (2011) refers to as the “post-political” framing of climate change.

Due to the adverse local impacts of large-scale renewable energy projects, critical geographers and anthropologists also emphasise local level resistance to them (Avila-Calero, 2017). In the Global South, Avila (2018) documents how opponents of windfarms have utilised an environmental justice storyline in addition to notions of “landscape” and “wildlife protection” often seen in developed countries. This “discourse of opposition” (Barry et al, 2008:74) focuses on the defence of indigenous territories and livelihoods.

### 2.3 A Multi-Scalar Approach

What emerges from both the literature on LSLA and energy transitions is the need for more studies that not only acknowledge but also make explicit the interaction between international, national and local dynamics (Büscher, 2009). Although the precise impact projects have on local communities is context-specific, such projects are nevertheless driven by global processes and articulations (Fairhead et al, 2012). The role of global concerns over climate change and the “energy crisis” combined with the growing interdependence of energy systems means that scholars highlight the need for a multi-scalar political economy approach that is attentive to the different actors involved across different scales (Bridge et al, 2018). Thus, local, national and global processes cannot be seen in isolation (Beck et al, 2017; Coenern et al, 2012).

Furthermore, scale-making is also a discursive process. The scale on which a problem is defined is closely related to the level of decision-making at which the problem should be addressed and the sacrifices that are deemed necessary (Beck et al, 2017). Therefore, within such discursive strategies, “thinking globally” often means to think in universal ways about the Earth and its future rather than to think about global relationships (Lawhon and Patel, 2013:1057). This precludes questions of justice and responsibility. Thus, there is a need to consider and analyse the various claims made by different actors at international, national and local levels, paying particular attention to what they “make salient and what they silence” (Lawhon and Patel, 2013:1057).

At the same time, scholars also note how a multi-scalar approach is best understood as a relational one (Rignall and Atia, 2017). Global, national and local actors are not static categories that are either in opposition or support of one another but instead we see the formation of “coalitions” and “counter-coalitions” which link actors across scales (Bulkeley, 2000; Keeley and Scoones, 2003; Wolmer et al, 2006; Scoones, 2016; Roberts et al, 2018). McEwan’s (2017:1) study on South Africa, for example, reveals how the interests and motives of global investors, national governments and

local communities exist in “uneasy co-existences”. Thus, considering the interplay and relationships between scales is important.

By combining the sets of literature outlined, this thesis provides novel insights into LTWP. The small selection of studies that exist on LTWP explore the effects of exclusion on local communities (Drew, 2017), the role of the project in exacerbating pre-existing conflict between ethnic groups in the Rift Valley (Schilling et al, 2018) and local level resistance to the project (Cormack and Kurewa, 2018; Achiba, 2019). Thus, they fail to make explicit the connections across scales by identifying the different international, national and local actors involved and the discourses presented by those actors. In addition, these studies focus almost exclusively on issues related to land and fail to combine the two sets of literature discussed above. Thus, this thesis aims to address this gap by: (1) drawing on theories from both the literature on LSLA and energy transitions; and (2) adopting a multi-scalar approach which both identifies the international, national and local actors involved in LTWP whilst also analysing the claims made by these different sets of actors.

### 3. Theoretical Framework and Methodology

#### 3.1 Theoretical Framework

##### 3.1.1 Multi-Scalar Approach and Exclusion Through Legitimation

This research is structured around a multi-scalar approach with the analysis happening at the international, national and local level. To conduct this analysis, there are two insights from studies on multi-scalar approaches that are especially relevant.

The first is that scale is socially constructed (Brown and Purcell, 2005). Scales are made through political and discursive struggles (Swyngedouw, 1997) and the outcomes of scalar arrangements are the result of actors' political strategies rather than the inherent quality of scales (Hameiri and Jones, 2017). As Lawhon and Patel (2013:539) argue, in such processes "the local may be understood as particular and politically biased, the global is often associated with scientific universality and political neutrality". Therefore, we need to be attentive to how scale is invoked by different actors to promote particular scalar arrangements.

The second insight relates to the notion of "jumping scales" (Towers, 2000). This means that actors can move between scales. For example, local level grassroots organisations can build alliances with international non-governmental organisations (NGOs) and/or make claims that appeal to globally recognised discourses such as environmental justice and indigenous peoples' rights (Towers, 2000). Similarly, actors appeal to different scales simultaneously. For example, international actors will frame their case at multiple scales including discourses that appeal to the global, national and local level (Gough, 2004). Thus, we also need to be aware of how actors move outside of their assigned scale (Brown and Purcell, 2005).

Therefore, using Hall et al's (2011) "powers of exclusion" and their notion of legitimation, this study focuses on international and national actors' discursive strategies of exclusion (Hall et al, 2011) and in particular how they invoked different conceptions of scale to support their arguments. In addition, it also considers how local actors have responded to these exclusionary legitimations.

## 3.2 Methodology and Analytical Strategy

### 3.2.1 The Identification of Actors and Data Collection

The category international refers to actors that operate in multiple different countries and/or whose headquarters reside outside of Kenya, whereas the term global refers more to processes. National and local refers to actors residing within Kenya. The local level is further refined to where LTWP is situated and its direct surroundings. In many ways, these categories are schematic. At times, the Kenyan government is an international actor but for analytical purposes it is useful to differentiate them in this way while bearing in mind the “messy middles” (Scoones, 2016:309).

At the international level, this thesis considers those who have played a direct role in LTWP either in terms of investment and/or construction – all of whom it transpires are international (table 1). To identify these actors, pre-existing literature has been used and the results triangulated. In particular, the LTWP website contains a list of investors and contractors while Klagge and Nweke-Eze’s (2020) study contains a detailed list of the project’s financialization. For each actor, I visited their website and used the search box to find mentions of LTWP. In most instances this brought up short case studies. Documents consulted also include those on LTWP’s website such as Environmental and Social Impact Assessments. For some actors, no documents mentioning LTWP were found.

To identify national actors a similar process has been undertaken. In particular, studies by Newell, Phillips and Pueyo (2014), Newell and Phillips (2016), Osiolo, Pueyo and Gachanja (2017) and Ireri (2018) have been used to identify the main ministries involved in Kenya’s energy transition and their key documents. The majority of these documents mentioned LTWP and/or wind power in Marsabit County. In addition, since LTWP is registered under the Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC) I have also consulted Kenya’s Intended Nationally Determined Contributions which again mention wind power.

For the local level, pre-existing studies have been used. In particular, studies by Drew (2017), Schilling et al (2018), Cormack and Kurewa (2018) and Achiba (2019) all focus on the local level and identify various groups who have been affected by LTWP. Since this is a desk-based study accessing the local level has been challenging. The only document consulted at the local level is the court case filed against the LTWP in 2014.

Table 1: A list of actors identified and the documents consulted.

	<b>Equity Investors (= consortium members)</b>	<b>Documents</b>	
<b>INTERNATIONAL</b>	KP&P Africa	Webpage	
	Aldwych International	NA (website contains a link to LTWP website)	
	Vestas	Webpage Socio-economic study of key impacts from Lake Turkana Wind Power (2018)	
	Danish Investment Fund for Developing Countries (IFU)	Webpage	
	The Norwegian Investment Fund for Developing Countries (Norfund)	Webpage	
	The Finnish Fund for Industrial Cooperation Ltd (Finnfund)	Webpage Socio-economic Impact of Lake Turkana Wind Power in Marsabit (2020)	
	SandPiper	NA	
	LTWP Website	Promotional material Environmental Impact Assessment Reports	
	<b>Debt Investors</b>		
	African Development Bank (AfDB)	Webpage	
	European Investment Bank (EIB)	Webpage	
	Eksport Kredit Fonden of Denmark (EKF)	NA	
	Netherlands Development Finance Company (FMO)	Webpage	
	EU Africa Infrastructure Trust Fund	NA	
	PROPARCO	Webpage	
	The Trade and Development Bank	NA	
	Deutsche Investitions und Entwicklungsgesellschaft (DEG)	Webpage	
	East African Development Bank	NA	
	Interact Climate Change Facility	NA	
	Tridos Bank	NA	
	<b>Project Partners (contractors)</b>		
	Vestas	See above.	
	Siemens	NA	
Southern Engineering Company Ltd (SECO)	NA		
RXPE Group	NA		
Civicon Limited	NA		
<b>NATIONAL</b>	<b>Government of Kenya/Ministry</b>		
	Ministry of Energy and Petroleum (MEP)	The Least Cost Power Development Plan, 2011-2031.	
	Ministry of Environment and Mineral Resources (MEMR)	Kenya's Intended Nationally Determined Contribution (2015). National Climate Change Action Plan, 2013 -2017. National Climate Change Response Strategy – 2010. National Climate Change Action Plan, 2018-2022.	
	Ministry of Development of Northern Kenya and Arid Lands (MDNKAL)	Vision 2030 Development Strategy for Northern Kenya and other Arid Lands (2012).	
<b>LOCAL</b>	The local level utilises pre-existing studies which are primarily based on fieldwork and interviews with local communities. These are supplemented by the Environment & Land Case 163.		

Table: Author's own. Compiled using Klagge and Nweke-Eze's (2020), the LTWP website, Newell, Phillips and Pueyo (2014), Newell and Phillips (2016), Osiolo, Pueyo and Gachanja (2017), Ireri (2018), Drew (2017), Schilling et al (2018), Cormack and Kurewa (2018) and Achiba (2019).

### 3.2.2 Data Analysis: Discourse Theory and Method

To explore exclusion through legitimisation this thesis adopts discourse analysis (DA) as its methodology. This study uses Dryzek's (2013:9) simplified definition of discourse which views it as "a shared way of apprehending the world". Building on Foucauldian approaches to knowledge and power, the underlying assumption of DA is that language matters because it shapes our view of the world and it has consequences (Hajer and Versteeg, 2005).

In particular, this study uses Hajer's (1995) inspired DA which is popular in environmental politics (Isoaho and Karhunmaa, 2019). Although Hajer's (1995) approach is inspired by Foucault, explicitly Foucauldian approaches to DA are more suited to macro studies. Furthermore, Hajer's (1995) approach to discourse includes the analytical concepts of "storylines" and "discourse coalitions" – both of which are useful for multi-scalar approaches (Isoaho and Karhunmaa, 2019).

Storylines are devices that are used to frame situations in particular ways to convince audiences (Hajer, 1995). Relatedly, discourse coalitions are: (1) "sets of storylines"; (2) "the actors who utter these storylines"; (3) "the practices in which this discursive activity is based" (Hajer, 1995:60). Discourse coalitions, however, differ from political coalitions since they are not necessarily based on shared interests but rather storylines are the "cement" that keeps them together (Hajer, 1995:65).

After identifying the actors and documents, the documents were read and substantive themes were identified and coded. The themes that emerged from the documents were then organised into "storylines" with a particular focus on identifying discourse coalitions between international and national actors (see appendix).

### 3.3 Limitations

There are limitations to this study. Firstly, DA has been criticised for the subjectivity of the researcher's text selection and interpretation (Verschuere, 2001). The research design has attempted to reduce this limitation by searching for at least one document by all of the major actors involved. Therefore, the most common discourse strands will have been identified. Nevertheless, I recognise the subjectivity of my position and acknowledge the possibility that some documents may have been unintentionally excluded.



Secondly, this study chooses depth over breadth. Although a detailed case-study allows us to “dig deeper, sample more effectively and triangulate better” (Scoones et al, 2013:479), especially when taking a multi-scalar approach, LTWP should not necessarily be seen as a typical case and the results of this study should not be used to create a global picture (Oya, 2013).

Thirdly, this thesis does not seek to make causal claims. This is because discourse is only one element among many others in determining social realities (Hansen, 2006). Indeed, Hall et al (2011) identify four “powers of exclusion”, namely regulation, force, the market, and legitimisation. However, this thesis focuses on the latter and therefore acknowledges that legitimisation is not the only factor causing exclusion but is instead only a contributing force. Nevertheless, “legitimations are of signal importance...[since they provide] the normative underpinning to regulatory, forceful and market powers” (Hall et al, 2011:18) and therefore the singular focus on them is warranted.

## 4. Context

This section explains LTWP and some of the issues that have been raised by local communities and human rights organisations. In addition, it situates the project within its historical and political context.

### 4.1 LTWP and Community Issues

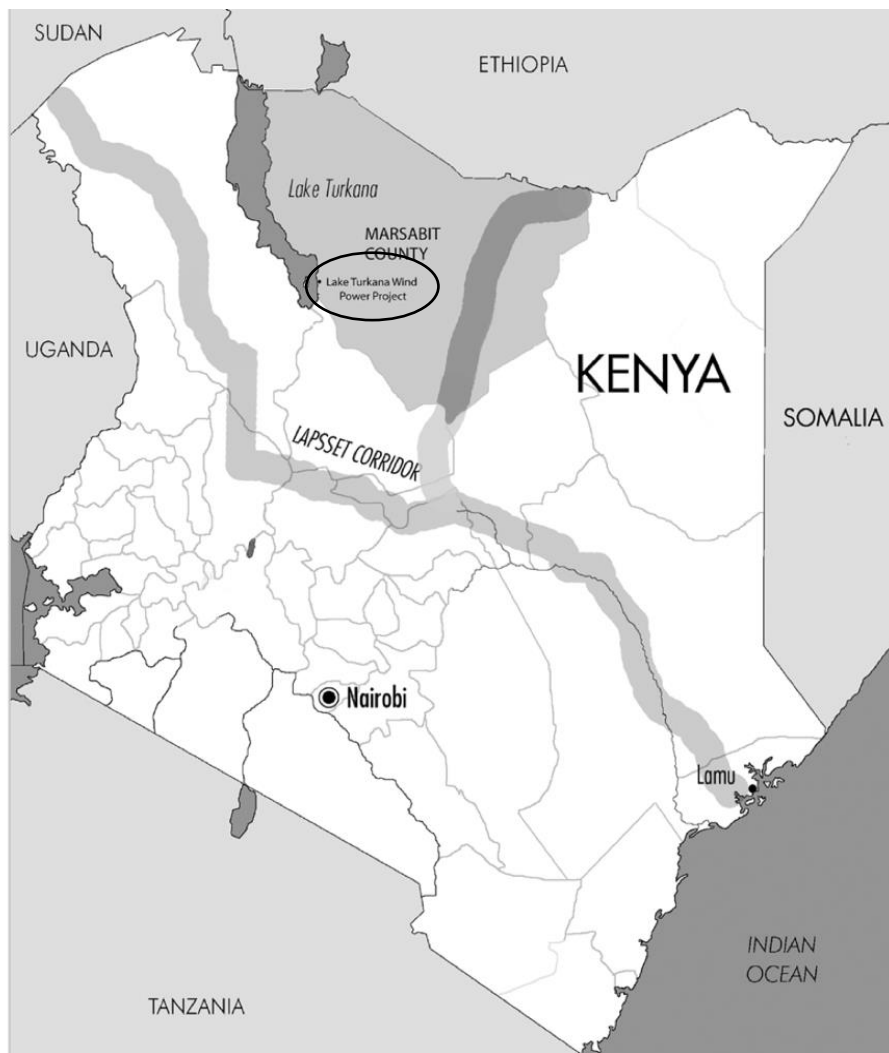
The LTWP project is situated on the south-eastern side of Lake Turkana in Marsabit County of Kenya's Rift Valley (image 1). This is an area where 80 percent of the population depends on pastoralist production (GoK, 2020). The Samburu and Turkana pastoralist groups dominate the area around the project with El Mono and Rendille groups also present. The project sits on a concession of 150,000 acres and of those it occupies 40,000 acres (leaving a buffer of 110,000 acres) (LTWP, 2011). LTWP leased this land from Marsabit County for 33 years with the option to extend the lease up to 99 years. The project started in 2006 and reached financial close in 2014 with construction commencing in 2015 and finishing in mid-2017. Currently, the site has 365 wind turbines with a generation capacity of 310 megawatts (LTWP, 2019).

The LTWP project has encountered complaints from local communities and human rights organisations. These focus on the adverse effects of the project on pastoralists' livelihoods and accusations of illegal land acquisition (Sena, 2015, Voller et al, 2016 and IWGIA, 2019). In 2014 the new Marsabit County Government brought a court case against the LTWP consortium, the old Marsabit County Council and the National Government accusing them of acquiring the land illegally (Environment & Land Case 163). These accusations centred on the LTWP's failure to acquire consent from affected communities or to engage in a proper consultation process (ibid).

In addition, LTWP has ignored international standards for Free, Prior and Informed Consent (FPIC) and for providing adequate compensation. The consortium argues that the Samburu, Rendille and Turkana are not indigenous groups because in Northern Kenya they are "the most dominant tribes" (LTWP, 2014:7). At the international level, however, these groups are recognised as indigenous (IWGIA, 2019). Furthermore, the village of Sarima was resettled to make way for the road that was constructed for the project and no compensation was provided (IWGIA, 2019). This is because, as the consortium states, "Nomadic pastoralist[s] have customary rights of use to land pastures, however have no recognisable legal right or claim to the land other than use and are therefore not eligible for land compensation" (LTWP, 2014:7). Although pastoralist groups have retained the right

to graze their livestock, there are reports that their access has been curtailed with areas fenced off and reports of threats from security personnel (Voller et al, 2016).

Image 1: Lake Turkana Wind Power Project in Marsabit County.



Map Credit: IWGIA (2019:20).

#### 4.2 The Historical and Political Context

During British colonial rule, Marsabit County was part of the “Northern Frontier District” – an area seen as having low economic potential (Klopp, 2000). For this reason, colonial authorities neglected most of Northern Kenya and this legacy was largely adopted by successive independence governments (Greiner, 2013).

Despite this history of neglect, over the last decade the region has taken centre stage in the country’s state-led national development plans (Mosley and Watson, 2016; Kochore, 2016; Elliot, 2016).

Northern Kenya has become a central aspect of the government's "Vision 2030" which aims to transform Kenya into a middle-income country and consequently a number of power and infrastructure projects are unfolding in the region – including the extraction of oil (Agade, 2014), geothermal power in Turkana (Hughes and Rogei, 2020) and the Lamu Port and South Sudan Ethiopia Transport (LAPSSET) corridor (Chome, 2020).

Nevertheless, the Rift Valley has a long history of conflict which has been exacerbated by both climate change (Schilling et al, 2012; Schilling et al, 2014) and by the re-introduction of multi-partyism in 1991 (Greiner, 2013). Since the re-introduction of multi-partyism, the Rift Valley has become a region of profound political importance due to its ability to tip the balance of power in electoral struggles (Boone, 2012). Furthermore, Kenya's New Constitution of 2010 and the process of decentralisation stipulated within it has further entrenched issues of rent-seeking and ethnic patronage politics (D'Arcy and Cornell, 2016). As Greiner (2013:218) states, decentralisation and ongoing land reforms have created opportunities for "violent (re)negotiation of territorial claims". The Rift Valley, therefore, remains the region of Kenya where the "allocation of land is most visibly politicized and most bitterly contested" (Boone, 2012:75). Consequently, land has been the most contentious issue for LTWP.

The LTWP project highlights how land tenure practices play a major role in exclusion (Alao, 2007; Boone, 2015). The land that LTWP leased from Marsabit County Council was designated as 'Trust Land' which is communally owned land that is held in trust by local authorities (Wily, 2013). As Wily (2012:478) notes, however, many African states do not sufficiently protect customary and informal land tenure so although LSLA may violate human rights principles they are often still legal under national law. Thus, in this instance, exclusion is largely a result of Kenya's land tenure regime but it is nevertheless a process that also requires "ideological legitimation" (Levien, 2013:382) and that is the focus of this study.

Thus, LTWP has unfolded in a marginalised area where ethnic tensions and disputes over land have a long history. The next section builds on this by detailing the actors involved in LTWP at the international, national and local level.

## 5. Analysis and Discussion

### 5.1 Actors at the International, National and Local Scale

To explore the process of exclusion through legitimisation from a multi-scalar perspective, the actors at the international, national and local level first have to be identified (see table 2).

Table 2: The Actors Involved in the LTWP Project

INTERNATIONAL	<b>Equity Investors (= consortium members)</b>			
	<b>Organisation/Company</b>	<b>Type</b>	<b>Country of Origin</b>	<b>Capital Invested</b>
	KP&P Africa	Project Development	Dutch	€31m
	Aldwych International	Project Development	British	€38m
	Vestas	Turbine Production	Danish	€16m
	Danish Investment Fund for Developing Countries (IFU)	Development Finance	Danish	€7.5m
	The Norwegian Investment Fund for Developing Countries (Norfund)	Development Finance	Norwegian	€16m
	The Finnish Fund for Industrial Cooperation Ltd (Finnfund)	Development Finance	Finnish	€16m
	SandPiper	Geographic Information Systems (GIS) Firm	East African*	€0.5m
	<b>Debt Investors</b>			
	<b>Organisation/Company</b>	<b>Type</b>	<b>Country of Origin</b>	<b>Capital Invested</b>
	African Development Bank (AfDB)	Development Finance	African	€115m
	European Investment Bank (EIB)	Development Finance	European	€100m
	Eksport Kredit Fonden of Denmark (EKF)	Export Credit Bank	Danish	€120m
	Netherlands Development Finance Company (FMO)	Development Finance	Dutch	€35m
	EU Africa Infrastructure Trust Fund	Development Finance	European	€25m
	PROPARCO	Development Finance	French	€20m
	The Trade and Development Bank	Development Finance	African	€10m
	Deutsche Investitions und Entwicklungsgesellschaft (DEG)	Development Finance	German	€20m
	East African Development Bank	Development Finance	African	€5m
Interact Climate Change Facility	Green Finance	European	€30m	
Tridos Bank	Private Bank	Dutch	€6m	
<b>Project Partners (contractors)</b>				
<b>Organisation/Company</b>	<b>Type/Role</b>	<b>Country of Origin</b>		
Vestas	Wind turbine production and maintenance	Danish		
Siemens	Grid and substation	German		
Southern Engineering Company Ltd (SECO)	Accommodation	East African		
RXPE Group	Connecting the substation to the national grid	Chinese		
Civicon Limited	Construction of the roads	East and Central Africa*		

	<b>Other International Actors</b>	
	<b>Organisation/Company</b>	<b>Role</b>
	International Work Group for Indigenous Affairs (IWGIA)	Partnership with the advocacy group Friends of Lake Turkana and the Pastoralist Development Network of Kenya (critical of the LTWP project)
<b>NATIONAL</b>	<b>Government of Kenya/Ministry</b>	
	<b>Ministry of Energy and Petroleum</b>	<b>Role</b>
	Ministry of Environment and Mineral Resources	Defines energy policy and is responsible for overall planning
	Ministry of Development of Northern Kenya and Arid Lands	Responsible for UNFCCC commitments and for mainstreaming climate change into sectoral policies
<b>LOCAL</b>	<b>'Supporters'+</b>	
	<b>Organisation/Group</b>	<b>Details</b>
	The old Marsabit County Council	Agreed to lease the land to the LTWP consortium.
	The interested parties	In the court case they are in support of the LTWP project but are seeking better incorporation – mostly Samburu.
	Community Liaison Officers (CLOs)	The Chief Community Liaison Officer is a Samburu broker who is in charge of a team of other CLOs. Together they are responsible for job recruitment.
	<b>'Opponents'+</b>	
	<b>Organisation/Group</b>	<b>Details</b>
	The current Marsabit County Government	The new Marsabit County Government filed a lawsuit against the LTWP consortium in 2014.
	The petitioners	In the court case they describe themselves as “patriotic” Rendille leaders seeking justice for illegal land acquisition.
	Sarima Indigenous People’s Land Forum	A grassroots advocacy group formed by individuals that had been forcibly relocated from Sarima village to make way for the road (no documents can be found).
	Friends of Lake Turkana and the Pastoralist Development Network of Kenya	Kenyan-based NGO founded in Turkana seeking social, economic and environmental justice in the Turkana Basin.

Table: Author’s own. Compiled using Klagge and Nweke-Eze’s (2020), the LTWP website, Newell, Phillips and Pueyo (2014), Newell and Phillips (2016), Osiolo, Pueyo and Gachanja (2017), Ireri (2018), Drew (2017), Schilling et al (2018), Cormack and Kurewa (2018) and Achiba (2019).

\* SandPiper and Civicon Limited are Headquartered in Nairobi but operate throughout East Africa.

+ The terms “supporters” and “opponents” have been created for simplicity but they conceal a far more complex reality.

### 5.1.1 International Actors

As table 2 reveals, European companies and development finance institutions (DFIs) – which are specialized development banks owned by national governments – have played a major role in LTWP (Eberhard et al, 2016). The latter category has contributed around one third of equity and seventy percent of debt financing (Klagge and Nweke-Eze, 2020).

The LTWP project is owned by a consortium of co-developers and equity investors consisting of KP&P Africa, Aldwych International, Vestas, SandPiper and three Scandinavian DFIs including the IFU, Norfund and Finnfund (Klagge and Nweke-Eze, 2020). Debt financing comes from a range of European as well as African sources. In particular, the African Development Bank and European Investment Bank have led the project's debt raising after the World Bank pulled out in 2012 due to concerns that the windfarm would produce too much energy for the level of demand (Eberhard et al, 2016). Thus, LTWP is largely an example of a foreign-driven and privately financed project (Klagge and Nweke-Eze, 2020).

The prominent role played by European DFIs speaks to three trends. The first is the role that the European Union plays in "global environmental governance" and the importance that the Union has placed on claiming leadership in this area (Vogler, 2005). The second is the ability of donor states to exercise collective "disciplinary power" over the direction and neoliberal nature of Kenya's energy transition due to their control over finance, production and technology (Newell and Phillips, 2016:39). This is also important because, as Dryzek (2013:10) states, "discourses are intertwined with some material political realities". The third is the importance that donors place on creating trade and investment opportunities for their own corporations (Newell et al, 2014). The role of Scandinavian DFIs in the project is indicative of this and the IFU convey this explicitly, stating that LTWP helps "promote the sale of Danish climate technology" (IFU, 2019).

### 5.1.2 National Actors

Although the Kenyan government was not among LTWP's lenders, the government was responsible for allocating the land and for the power-purchase agreement which commits the government to buying power from LTWP for 20 years (Eberhard et al, 2016). Furthermore, LTWP has received high-level state support with President Kenyatta officiating the inauguration (LTWP, 2019).

The central state has also created a facilitating environment for renewable energy projects and has actively sought private-sector investment (Newell and Phillips, 2016). Within Sub-Saharan Africa, Kenya is one of the most progressive countries with regards to renewable energy commitments and corresponding policies (Irereri, 2018). Kenya aims to achieve 100% renewable energy by 2030 and has consequently embarked on an agenda to expand wind power (Naess et al, 2015).

### 5.1.3 Local Actors

At the local level, there are a wide range of responses that precludes any simple category of “local communities” (Oya, 2013). In particular, Achiba (2019) identifies two groups involved in the 2014 court case. The first is the petitioners, including members of the new Marsabit County Government, who brought the case against LTWP. As Achiba (2019:11) documents, “they represented themselves as patriotic Rendille leaders”. The second group is the interested parties who are mostly Samburu. Instead of opposing the project, this group seeks better incorporation (Achiba, 2019).

As table 2 shows, the state at the sub-national level has played a dual role. The old Marsabit County Council operated against the interests of the local communities and leased the land to LTWP while the new Marsabit County Government, which came to power in 2013, supports the community against LTWP (Achiba, 2019). Thus, we are again reminded of Wolford et al (2013:189) caution that states “never operate with one voice”. The changing role of the Marsabit County Government is related to the process of devolution since 2010 and the winning of the election by the Rendille-Gabra-Burji (REGABU) coalition. As Achiba (2019:12) notes, during the election “the main line of confrontation was that political leaders were either with us, or with the land grabbers (LTWP project) which was a measure of the aspirants’ degree of ‘Rendilleness’ or ‘Samburunesness’”.

In addition, a range of intermediary actors emerge as “go-betweens” (Fairhead et al, 2012). The LTWP consortium has made a number of connections with individuals at the local level. As Drew (2017;2020) notes in his ethnographic study, the Community Liaison Officer (CLO) is a local Samburu broker who is in charge of job recruitment and community involvement.

Furthermore, grassroots organisations have emerged in response to the project. These include the Sarima Indigenous People’s Land Forum (SIPLF), which was formed by local communities who experienced resettlement from Sarima village, and Friends of Lake Turkana and the Pastoralist Development Network of Kenya (Cormack and Kurewa, 2018). The latter has formed an alliance with the International Work Group for Indigenous Affairs (IWGIA) who, in turn, have released two reports on LTWP (Sena, 2015 and IWGIA, 2019). This points to the notion of “jumping scales” (Towers, 2000) and the importance of forming alliances between scales to effectively protest windfarms (Hochstetler, 2020).

This section has documented the “layers of different types of actors” (Borras et al, 2019:611) involved in LTWP and made explicit the roles played by international, national and local actors (Büscher, 2009). It has revealed how the project is dependent on international finance, expertise and technologies while also requiring a facilitating domestic environment. Thus, it supports the literature



on LSLA that stipulates how states and domestic elites play a key role alongside international actors (Wolford et al, 2013) and that “political reactions from below” vary greatly (Borras and Franco, 2013). Furthermore, it also reinforces the importance of discussing multiple scales simultaneously to draw attention to cross-scalar issues of justice and responsibility (Sovacool et al, 2017).

## 5.2 Discourse Coalitions Between International and National Actors

This section analyses and discusses the storylines that appear most commonly in discourse coalitions between international and national actors. In doing so, it shows that these actors rely on several discourse coalitions that work to both assemble land as a resource for investment and legitimise the exclusion of pre-existing users. In particular, and in-keeping with the multi-scalar approach, it argues that these actors invoke different conceptions of scale to advance their arguments and that appeals to the global, national and local frame their legitimising discourses. This section is divided into sub-sections that consider appeals to the global, national and local. In reality, these conceptions of scale work in tandem rather than in isolation and have been separated here for analytical purposes.

### 5.2.1 Appeals to the Global

The documents demonstrate that both international and national actors make several claims that appeal to the global scale. The first major discourse coalition that emerges is based on a storyline that presents **Kenya as a global leader**. Two international actors, for example, state how:

“Kenya has the potential to become one of Africa’s great success stories” (Vestas, 2018).

“Kenya is quickly becoming Africa’s leading nation in the use of renewable energy”  
(FinnFund, n.d.).

Similarly, national actors describe how:

“The implementation of low carbon climate resilient development demonstrates Kenya’s leadership in the global fight against climate change” (MENR, National Climate Change Action Plan, 2013).

While President Kenyatta at the inauguration of LTWP stated that “We again raise the bar for the continent...Kenya is without doubt on course to be a global leader in renewable energy” (AfDB, 2019).

The second major discourse coalition that emerges in the global appeals is based on a storyline that emphasises **the urgency of climate change**. For example, international actors state how:

“The population in Africa is projected to grow very fast and if Africa should be fuelled by fossil fuels it would be a catastrophe for Africa and for the world. So, we need to utilise the sun and the wind which is all over the place in Africa” (LTWP, n.d.).

“The Lake Turkana wind farm is a game changer. It's the biggest in Africa, offsets 700000T of carbon dioxide emissions per year...With EuropeAid and the European Union Delegation to Kenya, we are proud of projects like these that tackle global climate change” (EIB, n.d.).

While national actors describe how:

“Climate Change is the most serious global challenge of our time” (MENR, Intended Nationally Determined Contributions, 2015).

“Kenya acknowledges that the change in the Earth’s climate and its adverse effects are a common concern of humankind” (MENR, National Climate Change Response Strategy, 2010).

These two storylines reveal how international and national actors invoke the global scale to legitimise exclusion. The above discourses lend both a sense of urgency and moral superiority to the actors’ arguments (McCarthy and Thatcher, 2019) and ask those experiencing exclusion to pay the price for a global benefit (Hall et al, 2011).

By invoking the global scale, these actors both construct and appeal to a sense of global citizenship (Demeritt, 2001). Within these discourses, climate change is presented as a global humanitarian emergency that is only enhanced by apocalyptic phrases (Swyngedouw, 2011) such as fossil fuel-based development being a “catastrophe for Africa and for the world”. Such global scaling, however, conceals the uneven power relations that constitute these relationships and this prevents any discussion of justice and responsibility (Sovacool et al, 2017). Thus, these framings have a de-politicising effect (Swyngedouw, 2011) whereby “thinking globally” becomes a way to think in universal ways about the Earth and its future rather than to think about global relationships (Lawhon and Patel, 2013:1057). Ultimately, this form of global scale making creates universalizing notions that make it easy to dismiss local resistance as individual and isolated opposition that is standing in the way of a global benefit (Fairhead et al, 2012).

### 5.2.2. Appeals to the National

International and national actors have also formed discourse coalitions that centre on the national scale and the national benefits of LTWP. The first major discourse coalition which emerges is a storyline that focuses on **national economic benefits**. For example, some common statements are:

“Based on a rough assessment that LTWP can reduce power outages by 12.5%, it is estimated to generate USD 332 million in production, USD 176 million in GDP and 54,000 jobs at a national level; Further, a randomly chosen 10% decrease in electricity costs from LTWP will generate USD 228 million in production, USD 134 million in GDP and 39,000 jobs” (Vestas, 2018).

“The renewable energy from Lake Turkana has resulted in a considerable reduction in the production of oil-based electricity in Kenya. The price of a KWh from the new wind park is around 0,55 Danish kroner, which is half the price for power emanating from fossil energy sources” (IFU, 2019).

“Climate change also presents opportunities for developing countries like Kenya...The ‘carbon market,’ where it is possible to trade carbon credits, presents an opportunity for developing countries to raise additional revenues for GHG emission reducing projects” (MENR, National Climate Change Response Strategy, 2010).

The above storyline is also tied to a second one which focuses on **the key role that LTWP will play in the attainment of Vision 2030**:

“The country’s long term development agenda as envisaged in the Vision 2030 identifies energy as one of the key infrastructural enablers, in making Kenya competitive in the global arena, the country urgently requires to fast track development of renewable energy sources” (LTWP, 2009:4).

“[The LTWP project] is also a Vision 2030 flagship project and will be transformative in terms of the development impact in the northern arid areas of Kenya, to Kenya’s electricity sector, and to the country as a whole” (AfDB, 2019).

“The expansion of geothermal power plants in Olkaria and Wind power in Turkana are vital in achieving Vision 2030” (MENR, 2017).

Furthermore, there is also a discourse coalition which forms with regards to **energy security**:

“The wind farm reduces Kenya’s dependency on diesel and heavy fuel power stations” (KP&P Africa, n.d.).

“Increased use of the environmentally friendly renewable energy technologies for industrial and domestic use will reduce the dependency on oil-based energy sources, thereby increasing energy security” (MEP, 2016).

These statements reveal how both national and international actors also invoke the national scale to justify LTWP and the subsequent exclusion of pre-existing land users. In a similar vein to the global scale, these storylines convey a “communalist logic” (Howe, 2011:3) which emphasises people’s common interests since the windfarm “is about everyone” (Vestas, 2018). This, again, serves to undermine adverse local level impacts.

International actors in particular have aligned their storyline with the Kenyan government’s long-term development goals. Through consistent references to Vision 2030, international and national actors present the wind farm as a strategically important project for national development (Achiba, 2019). In this sense, then, both international and national actors have presented LTWP as an vehicle for national transformation (Lind et al, 2020). Indeed, as Mosley and Watson (2016:452) state with regards to large-scale infrastructure projects occurring in Northern Kenya and Southern Ethiopia, there “is a strong emphasis on the transformational power of technology and infrastructure” which suggests that such projects alone can tackle poverty and a long history of marginalisation.

Furthermore, these discursive narratives also convey a sense of “ecological modernisation” which assumes that economic growth and environmental protection complement one another (Fairhead et al, 2012). Climate change and energy insecurity are presented not only as a threat but also as business opportunities (Barry et al, 2008). This commercial narrative is explicit not only among the developers and investors but also among the government who sees the private sector as an essential partner in the country’s energy transition. This is not surprising given the neoliberal context in which

Kenya's energy transition is occurring and the broader context in which climate change is viewed as an economic issue (Newell and Paterson, 2010)

### 5.2.3 Appeals to the Local

International and national actors have also formed discourse coalitions around the local scale. Firstly, and building on the discourses discussed above, there is a storyline that focuses on **the benefits of LTWP for rural development** in terms of economic growth and security. For example, all of the documents contain text that reflect the following examples:

Vestas (2018) states that since the arrival of the wind farm and the construction of the road the rural economy has experienced a "0-30% price decrease for certain foods at local markets; Growth of fresh fish market with a three-fold net value increase for local fishermen; Direct job creation from LTWP Ltd. and sub-contractors (herein Vestas) of approx. 1,800-1,900 local jobs during construction".

"Communities around the project area feel that LTWP has contributed to enhancing security (the project site used to be referred to as a battlefield between Samburu and Turkana community)" (FinnFund, n.d.).

"A more robust infrastructure in Northern Kenya and other arid lands will stimulate investment and growth. It will create jobs, reduce poverty, improve terms of trade and lower the cost of doing business. Better infrastructure will improve security, stabilise the region, and strengthen its integration with the rest of the country and neighbouring markets" (MDNKAP, Vision 2030 in Northern Kenya and other Arid Lands, 2012).

Thus, the international and national promoters of LTWP have formed a discourse coalition around the local level benefits of the project which serves to justify the exclusion of people from the land in exchange for greater benefits in terms of economic growth and job opportunities.

In addition, there are two related storylines that both national and international actors utilise to assemble the land as a resource for investment, and in turn, to mask existing users and uses of that land. The first of these constructs the area as **a location that is uniquely suitable for wind development:**

“Due to its unique location, between Mount Kulal and Mount Nyiru (these mountains effectively serving as a funnel), incoming winds are consistently accelerated to average wind speeds in excess of 11 meters per second. By all measures, uniquely high numbers for a wind project” (KP&P Africa, n.d.).

“This is the windiest place on earth...The speed of the wind makes it clear that this was a huge opportunity for Kenya to bring clean, cheap and endless energy to the people” (Vestas, 2018).

“The experts taking the wind measurements on site initially thought that there was a fault in their equipment because the winds were so strong and steady” (FinnFund, n.d.).

“The natural endowment of renewable energy in Marsabit County is a golden opportunity” (MDNKAP, Vision 2030 in Northern Kenya and other Arid Lands, 2012).

Relatedly, there is a second discourse that emphasises **the availability of land** in the region:

“The entire concession is equivalent to less than 1% of Marsabit County’s total acreage” (Vestas, 2018).

“Turbines will be placed on the dry and bare ridges in this remote area” (Norfund, 2014).

“The windfarm site is very sparsely populated (1-2 people km<sup>2</sup>)” (LTWP, 2011:2)

“Only 132,000 households are in areas considered very good to excellent for wind investment which provides a good opportunity for the development of large wind farms as there would be minimal human interference” (MEP, 2011).

Together, these two storylines combine to convey the “resourcefulness” (Li, 2014:589) of the land for wind power and to remove other claimants. These narratives utilise expert knowledge to build “facts” about the technical and economic potential of the land which conveys a sense of scientific neutrality without any reference to social considerations (Keeley and Scoones, 2003; McCarthy,

2015). The wind, then, is constructed as an inert resource that can be easily exploited without consideration of the huge amount of land required to utilise it (Huber, 2015).

Furthermore, by emphasising the low population density and remoteness of the area the implicit message is that the land is empty and investable (Cormack and Kurewa, 2018; Achiba, 2019). At times, this narrative becomes explicit with the lawyers for LTWP stating in the court case that “the land in question in this matter is currently uninhabited” (Environment & Land Case 163).

Constructing the land as marginal and empty is, of course, not a new strategy but instead builds on pre-existing colonial discourse that have become a central means of transforming land into a resource by presenting it as “empty of people, histories, and claims, but full of potential for new and improved use” (Li, 2014:4). Thus, such narratives conceal the fact that the land in question is actually land that different ethnic groups have long used for various livelihood, social and spiritual purposes (Cormack and Kurewa, 2018).

Ultimately, international and national actors have formed several discourse coalitions which centre on appeals to the global, national and local. These actors discursively move between scales to frame their various legitimising arguments (Gough, 2004). Collectively, these discourses serve to promote scalar arrangements that are beneficial to the promoters of LTWP because they construct the global and national scale as superior to local level concerns. The implicit message is that local level resistance is the result of isolated and individual actions that are standing in the way of collective global and national benefits. This message is reflected in a statement by President Kenyatta: “Today, we witness the commencement of a great project...It is my duty to encourage the local people to open their eyes to the opportunities coming down this way, and to get ready to take advantage of them. Nothing will get in the way of this wind turbine project” (cited in Voller et al, 2016). Scalar arrangements, then, are not only a symptom of material realities, in other words international and national actors control of finance and technology, but are also a result of discursive construction (Lawhon and Patel, 2013).



### 5.3 Local-Level Responses

This section further expands on the spectrum of “political reactions from below” (Borras and Franco, 2013) to LTWP and how the exclusionary powers of national and international actors have played into local dynamics. Drawing mostly on pre-existing ethnographic studies, this section shows how the discourse coalitions between international and national actors contrast with claims made at the local level. This returns us to Hall et al’s (2011:19) point that although “legitimizations are powerful...they are never unopposed”. Ultimately, this section shows that in response to LTWP local communities have presented competing claims at the local scale whilst also drawing, at times, on globally recognised discourses.

A number of responses by residents centre around competing claims made at the local scale. Cormack and Kurewa (2018:101) show how LTWP has resulted in “increasingly exclusive claims to land and interpretations of local history”. Members of the Turkana community, for example, claim that Sarima village has been their home for over fifty years. In contrast, the Samburu claim that Sarima is instead a part of their ancestral land and the burial place of their predecessors, while the Rendille assert that they are the original occupants of the land and were forced from their home by Turkana raiders (Cormack and Kurewa, 2018). Local community members, then, have deployed strategic portrayals of ethnicity and history to claim exclusive rights to the land and project benefits (Greiner, 2016; Cormack, 2016). This highlights an important point about how “exclusion has a double edge: every counter to one discourse of exclusion necessarily proposes exclusion on other grounds” (Hall et al, 2011:12). Thus, at the local level, different ethnic groups’ aspirations for access to land has automatically resulted in a desire to exclude other groups at the same level.

Furthermore, many of the tensions between residence are caused by competition for integration into the project and in particular unmet promises for jobs. As Schilling et al (2018:99) state, “The opportunities for employment at LTWP are a focus for claims and counter-claims about entitlements”. In particular, members of the Turkana and Rendille communities have complained how most of the jobs have been given to the Samburu, with one interviewee asserting that “These people [from LTWP] don’t employ us, they only employ the Samburu” (cited in Schilling et al, 2018:102). In contrast, the Samburu do not oppose LTWP because they “have begun to enjoy the fruits of the project” (Environment & Land Case 163). Thus, these two instances are an example of what Borras and Franco (2013) have termed “poor people versus poor people” conflict whereby social groups are not united in their fight against LTWP but are instead divided amongst themselves.

Alongside these claims, however, there are also examples of local community members appealing to globally recognised discourse. In the court case, the petitioners (members of the Rendille community) claim that “consent was never sought and this infraction amounted to a clear violation of the International Finance Corporation (IFC) Performance standards especially No. 7 on indigenous peoples and No. 8 on cultural Heritage” (Environment & Land Case 163). This shows how the petitioners have appealed to global governance principles and framed their resistance in terms of well-established global discourses of indigenous peoples’ rights (Achiba, 2019). Indeed, this is indicative of what Avila (2018) labels as an “emerging environmental justice storyline” whereby opponents to windfarms frame their resistance in terms of the defence of local livelihoods and indigenous territories. At the local level, then, “jumping scales” (Towers, 2000) is a tactic that local communities can utilise to challenge international and national actors by deploying their own forms of expertise (Enns, 2016). Ultimately, this section shows that international and national actors’ legitimisations do not go unchallenged. However, despite these challenges, LTWP has been successful in ensuring its access to land.

## 6. Conclusion

This thesis aimed to explore how “exclusion” has been justified and legitimised in the LTWP project. In doing so, it adopted Hall et al’s (2011:7) definition of exclusion as “the ways in which people are prevented from benefiting from things” – in this instance land – and focused on the power of legitimisation. Through a multi-scalar lens, this thesis revealed both the complex web of international, national and local actors involved in the project and how these actors deploy different discursive constructions of scale to frame their legitimisations.

Firstly, with regards to the actors, this thesis demonstrated that LTWP has relied on international finance, technology and expertise. In particular, European DFIs and companies have played a leading role and this is reflective of the broader political economy of Kenya’s donor-led neoliberal energy transition (Newell and Phillips, 2016). The project, however, would not have been possible without a facilitating domestic environment and the high-level state support it has received. Indeed, this confirms an important point of the LSLA literature which highlights the role that states and domestic elites play in orchestrating and legitimising land deals. Thus, this thesis has also highlighted the interconnection between scales and how international actors are reliant on domestic governments at the national level and “middlemen” at the local level.

Secondly, this thesis has shown how international and national actors have legitimised the acquisition of land and the exclusion of pre-existing users by appealing to multiple scales simultaneously. These actors appeal to and invoke the global scale by presenting Kenya as a global leader in renewable energy and climate change as a global emergency. This lends both a sense of urgency and moral authority to the actors’ arguments whilst also appealing to the undifferentiated interests of a global community. Ultimately, it shows how claims made on a global scale can be used to legitimise exclusion at the local level (Tsing, 2000).

In addition, international and national actors have appealed to the national scale by presenting LTWP as a transformative project that will contribute towards development in terms of economic growth, achieving Vision 2030 and energy security. Collectively, by invoking the global and national scale, these actors’ perpetrate universalizing notions that make it easy to dismiss local resistance as individual and isolated opposition that is standing in the way of communal benefits (Fairhead et al, 2012).

Furthermore, with regards to the local scale, international and national actors emphasise the role of LTWP in rural development whilst also seeking to construct the land as both uniquely suitable for wind power and available. These discourses combine to convey the “resourcefulness” (Li, 2014:589) of the land and to remove other claimants. Together, they also mask both the land-intensive nature and the social costs of the project. Ultimately, according to these narratives, the answer to several global, national and local problems is “literally blowing in the wind” (IFU, 2019).

Lastly, this thesis considered the variety of “political reactions from below” (Borras and Franco, 2013) to LTWP and how the exclusionary powers of national and international actors have intertwined with local dynamics. It revealed how pre-existing ethnic tensions manifest in competing claims to land and entitlements which themselves carry their own exclusionary desires. In addition, it showed that legitimisation does not go unchallenged and points to the possibility for actors at the local level to “jump scales” by establishing connections with actors at other scales, in this instance the International Working Group for Indigenous Affairs, or by appealing to globally recognised discourses (Towers, 2000).

Ultimately, by adopting a multi-scalar approach, this thesis has demonstrated the need to be attentive to the interaction between scales and how global, national and local dynamics cannot be seen in isolation.

There are broader implications to this study. Firstly, Kenya is still at the initial stages of its energy transition and consequently LTWP may offer lessons for future projects. It is interesting to note that two windfarms – the Kinangop Wind Park and the Baharini Wind Power Project – were recently cancelled in 2016 and 2020 respectively over land issues (Kavilu, 2021).

Secondly, and relatedly, since 2015 164 countries have adopted renewable energy targets and of those 131 are developing and emerging economies (IRENA, 2016). Therefore, LTWP demonstrates that in the global transition to renewable energy we have to be attentive to issues of social justice to ensure that the benefits and implications of such projects do not reinforce pre-existing inequalities. Thirdly, then, renewable energy projects are increasingly becoming an important part of the global land rush and researchers within this area need to extend their analytical strategies to account for these trends (McCarthy and Thatcher, 2019).

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## 8. Appendix

Coding document:

Code	Source	Example Text
Global Appeals		
Kenya as a global leader	Vestas (2018)	"Kenya has the potential to become one of Africa's great success stories" (Vestas, 2018)
	FinnFund (n.d.)	"The good news is that Kenya is quickly becoming Africa's leading nation in the use of renewable energy"
	LTWP (n.d.)	"Kenya is an inspiration to other countries – and a model of how public-private partnerships can work. The more you can fuel Africa in renewables in a business-like way, the more you will have of it."
	MENR (2015)	"Kenya is determined to continue playing a leadership role in addressing climate change by communicating a fair and ambitious contribution".
	MENR (2013)	"Demonstrating global leadership – The implementation of low carbon climate resilient development demonstrates Kenya's leadership in the global fight against climate change. The leading-edge work to mainstream the Climate Change Action Plan across national and county government departments through the national planning process is an example for other countries"
	AfDB (n.d.)	President Uhuru Kenyatta said, "We again raise the bar for the continent ...Kenya is without doubt on course to be a global leader in renewable energy"
	Norfund (n.d.)	"This project, which is a major game changer in global sustainable renewable energy, portends opportunities and lessons for the country. It places Kenya at the centre and leadership position in as far as clean energy is concerned. In fact, it is a global example of how renewable energy can deliver sustainable, inexpensive energy to the national grid. It is no wonder that it has won recognition and several international accolades in the last few months – voted the African Renewable Energy Deal of the Year by Thomson Reuters and the Infrastructure Journal.
Climate change	FinnFund (n.d.)	"The way developing countries meet their rapidly growing energy needs will be critical to curbing climate change."
	LTWP (n.d.)	"Africa desperately needs energy and that energy must come from solar, wind, renewables otherwise all the energy needs of Africa will destroy the world"  "The population in Africa is projected to grow very fast and if Africa should be fuelled by fossil fuels it would be a catastrophe for Africa and for the world. So we need to utilise the sun and the wind which is all over the place in Africa. This dilemma can be addressed with massive investments in green energy - like Lake Turkana wind power which alone

		will offset over 700,000 tonnes of CO2 emissions a year.”
	EIB (n.d.)	<p>“The Lake Turkana wind farm is a game changer. It's the biggest in Africa, offsets 700000T of carbon dioxide emissions per year &amp; brings clean &amp; affordable renewable energy in Kenya. With EuropeAid and the European Union Delegation to Kenya, we are proud of projects like these that tackle climate change.”</p> <p>“Today climate change is a tangible reality and one of the major challenges of the 21st century. There is a need to devise new, less resource intensive and more resilient development models.”</p>
	MENR (2010)	<p>"Together we can tackle climate change"</p> <p>“It is universally accepted that climate change is one of the greatest challenges facing humanity this century.”</p>
	MENR (2015)	“Climate Change is the most serious global challenge of our time”
	MENR (2013)	“Climate change is a global challenge that requires a global response”
<b>National Appeals</b>		
Economic benefits	Norfund (n.d.)	“Access to renewable energy is a prerequisite for development”
	Vestas (2018)	<p>“Investments in renewable energy are generally expected to deliver on three dimensions which are intrinsically linked to the 2030 Sustainable Development Goals: Climate change mitigation, increased access to affordable and clean energy and economic development and job creation. In this context, wind energy holds significant potential, especially in a developing country context challenged by energy insecurity, poverty and climate change”</p> <p>“Energy Supply &amp; Costs: Based on a rough assessment that LTWP can reduce power outages by 12.5%, it is estimated to generate USD 332 million in production, USD 176 million in GDP and 54,000 jobs at a national level; Further, a randomly chosen 10% decrease in electricity costs from LTWP will generate USD 228 million in production, USD 134 million in GDP and 39,000 jobs.”</p>
	AfDB (n.d.)	“The plant is expected to reduce power shortages by 12.5% and cut the cost of electricity in Kenya by up to 10%. It is proof of Kenya's commitment to pursue clean sources of energy and provides a major boost to the country's international commitments to lower greenhouse gas emissions.”
	IFU (2019)	“The renewable energy from Lake Turkana has resulted in a considerable reduction in the production of oil-based electricity in Kenya. The price of a KWh from the new wind park is around

		0,55 Danish kroner, which is half the price for power emanating from fossil energy sources.”
	MENR (2010)	“Climate change also presents opportunities for developing countries like Kenya, which can avoid the high-emission path that developed countries have pursued to attain their present high economic status. The ‘carbon market,’ where it is possible to trade carbon credits, presents an opportunity for developing countries to raise additional revenues for GHG emission reducing projects that also contribute to sustainable development. There are two types of carbon markets and both are relevant to Kenya. The two markets are: (i) the Clean Development Mechanism (CDM) compliance market under the Kyoto Protocol and (ii) Voluntary Carbon Markets (VCM), which emerged to fulfil the demand from organisations and businesses that wish to offset their carbon emissions voluntarily.”
Vision 2030	LTWP (2009)	<p>“The country’s long term development agenda as envisaged in the Vision 2030 identifies energy as one of the key infrastructural enablers, in making Kenya competitive in the global arena, the country urgently requires to fast track development of renewable energy sources that will not only meet the set out target/ milestones but also in tandem with the global trends.”</p> <p>“Energy is one of the infrastructural enablers of the 3 “pillars” of Vision 2030. The level and intensity of commercial energy use in a country is a key indicator of the degree of economic growth and development. Kenya is therefore expected to use more energy in the commercial sector on the road to 2030. As incomes increase and urbanization intensifies, household demand for energy will also rise. Preparations have been made to meet this growth in demand for energy under the Vision.”</p>
	AfDB (n.d.)	“It is also a Vision 2030 flagship project and will be transformative in terms of the development impact in the northern arid areas of Kenya, to the Kenya’s electricity sector, and to the country as a whole. It is also expected to generate up to US \$150 million annually in foreign currency savings to Kenya through fuel displacement costs.”
	FMO (n.d.)	“It is also a Vision 2030 flagship project and will be transformative in terms of the development impact in the northern arid areas of Kenya, to the Kenya’s electricity sector, and to the country as a whole. It is also expected to generate up to US \$150 million annually in foreign currency savings to Kenya through fuel displacement costs.”
	MENR (2015)	“Kenya will ensure enhanced resilience to climate change towards the attainment of Vision 2030 by mainstreaming climate change adaptation into the Medium Term Plans (MTPs) and implementing adaptation actions.”



	MENR (2013)	<p>“Achieving long-term sustainable economic growth up to and beyond Vision 2030 in the face of climate change is a primary concern. Kenya is already extremely susceptible to climate-related events and such events pose a serious threat to the socio-economic development of the country. Droughts and floods in particular have devastating consequences on the environment, society and the wider economy. According to the science of climate change, these impacts are likely to continue to affect the country in the future.”</p> <p>“Kenya’s Climate Change Action Plan will support efforts towards the attainment of Vision 2030 and encourage people-centred sustainable development – ensuring that climate change actions help the country move towards long-term development goals.”</p>
	MENR (2017)	<p>“Renewable energy promises to be the future of the region’s energy needs adding that provision of clean and reliable energy would be crucial to the success of Kenya’s Vision 2030 energy goals.”</p> <p>“Expansion of geothermal power plants in Olkaria and Wind power projects in Turkana, are vital in achieving Vision 2030 goal of universal energy”</p>
	Gok (2013)	<p>“Development projects recommended under Vision 2030 will increase demand on Kenya’s energy supply. Currently, Kenya’s energy costs are higher than those of her competitors. Kenya must, therefore, generate more energy at a lower cost and increase efficiency in energy consumption. The Government is committed to continued institutional reforms in the energy sector, including a strong regulatory framework, encouraging more private generators of power, and separating generation from distribution. New sources of energy will be found through exploitation of geothermal power, coal, renewable energy sources, and connecting Kenya to energy-surplus countries in the region.”</p>
Energy security	AfDB (n.d.)	<p>“Turkana’s launch proves that we are determined to continue to work relentlessly to close Africa’s energy gap. Our efforts will be felt in hundreds of thousands of Kenyan households and beyond”</p>
	KP&P Africa (n.d.)	<p>“The wind farm reduces Kenya’s dependency on diesel and heavy fuel power stations and makes an important contribution to Kenya’s carbon emission reduction”</p>
	Vestas (2018)	<p>“In terms of fossil fuels, although oil and gas discoveries are being made in Kenya, it has yet to start extraction and production from its reserves, and therefore entirely relies on imports of both crude and refined oil. As mentioned elsewhere in this report, the principal challenge of Kenya’s high</p>

		<p>petroleum consumption is the corresponding vulnerability of the economy to price fluctuations.”</p> <p>“In the context of Kenya’s stated ambition to reduce dependency and consumption of fossil fuels and increase the use of renewable energy sources, wind power is often stated to hold significant promise to Kenya’s future development”</p>
	LTWP (2008)	<p>“Currently the electricity sector in Kenya only reaches an estimated 10% of the population. Further electricity generation is therefore necessary in order to reach a greater percentage of the population and support economic growth. The situation is aggravated by the fact that 60% of the electric power produced is based on hydropower which has been often unreliable especially during the dry seasons. For example in 1999 and 2002, severe droughts greatly affected the power production of the hydroelectric dams and nearly brought economic activities to a standstill.</p>
	MEP (2016)	<p>“Kenya is committed to development of renewable energy resources, which are abundantly locally available, including geothermal, wind, solar, biomass and biogas. Increased use of the environmentally friendly renewable energy technologies for industrial and domestic use will reduce the dependency on oil-based energy sources, thereby increasing energy security.”</p>
<b>Local Appeals</b>		
Rural development	KP&P Africa (n.d.)	<p>“The wind farm offers employment to approximately 340 employees, which largely come from the local, primarily pastoralist, communities”</p> <p>“In addition to that, the project benefits are shared with the local communities through the Winds of Change Foundation. Furthermore, the revenues of the sale of the carbon credits generated by the wind farm are for a large part returned to the Kenya Power and Lighting Corporation (KPLC), and are to be invested in development projects in the wider project area”</p>
	Vestas (2018)	<p>“Rural Economy: 0-30% price decrease for certain foods at local markets; Growth of fresh fish market with a three-fold net value increase for local fishermen; Direct job creation from LTWP Ltd. and sub-contractors (herein Vestas) of approx. 1,800-1,900 local jobs during construction. 320- 350 jobs expected in operation.”</p> <p>“Health &amp; Education: Anecdotal evidence of increased access to, and quality of, health and education facilities from select local capacity building projects; 19% of bus passengers along project road are nurses and teachers; Government officials suggest increased access for education and health authorities in area.”</p>

		<p>“Governance &amp; Community Cohesion: LTWP access road represents a six-fold increase of the county government’s annual budget on infrastructure (2015/16); Increased presence of local government (services and security) observed by communities in project area; Level and source of community conflict relatively stable before/after LTWP project acc. to ACLED conflict data.”</p> <p>“Interviews with local government officials during the 2017 field study as well as the ERM interviews conducted with community members in 2016 provide a more nuanced picture with the LTWP project generally viewed in favourable terms by local communities, despite the current frustrations associated with the delay in operations. Government officials in the Loyangalani and Laisamis wards noted that there have been several changes in the community as a result of the project, including new diets (fish more commonly eaten, leafy vegetables now available), and an overall change in cultural habits and understanding.”</p>
	IFU (n.d.)	<p>“In the programme “Winds of Change”, the investors have committed themselves to show social responsibility. So far, more than 20 million Danish kroner have been spent on improving schools, healthcare and water supplies. Many initiatives to prepare the local population have been taken.”</p> <p>“Approximately 1,800 jobs were created in connection with the construction of the wind park, many of which were jobs performed by local craftsmen. This meant that more locals got full-time jobs with good wages compared to Kenyan standards for one or two years during the construction of the wind park.”</p>
	FinnFund (n.d.)	<p>“From own perceptions, communities around the project area feel that LTWP has contributed to enhancing security (the project site used to be referred to as a battlefield between Samburu and Turkana community). The largest department in the LTWP project is security. The project also has 20 additional policemen stationed at the site during the day and night. Respondents claim that this has contributed to the reduced cases of cattle rustling, community conflicts and conflicts due to water scarcity, with 30% mentioning that the situation has improved compared to the past, where these cases ranked between 85-89%.”</p>
	FinnFund (2020)	<p>“The socio-economic impact assessment provides a wealth of compelling evidence showing how LTWP has impacted the local communities, through direct employment and the projects implemented by WoC. Employees at LTWP have been financially</p>

		<p>empowered, with strong financial capabilities that provides them with the self-efficacy and freedom needed to make and exercise money management decisions. In our analysis, employees through the salaries earned at LTWP have made significant improvements to attain higher living standards outcomes evidenced by; the ability to build modern houses (an upgrade from the traditional manyattas), ability to educate their children in better schools (more than half in boarding school), improvements in the household and enhancing the livestock asset base empowering them to achieve higher food security status. 84% of the employees have a higher likelihood of falling above the national poverty line (i.e. only 16% are below the national poverty line as compared to the regional average that stands at 76%).”</p>
	LTWP (n.d.)	<p>“We are appreciating the effort of LTWP Project because our lives have been transformed in many different ways. We are looking forward to support the project and stand with it because the fruits we are getting are much juicy too. The state of peace is positive by now, people are integrating and living together. Our happiness is harmonious existence!” Stephen Nakeno, Sarima Spokesperson.</p> <p>“From my point of view as an elder, Lake Turkana Wind Power has been good for the communities living in this area. Most importantly, it has brought us fresh water [...] and security.” Lochillia Nyangayo, Clan Elder Loiyangalani.</p>
	MDNKAP (2012)	<p>“Kenya Vision 2030 aspires to be a country that is firmly inter-connected and identifies infrastructure as a key foundation for development. A more robust infrastructure in Northern Kenya and other arid lands will stimulate investment and growth. It will create jobs, reduce poverty, improve terms of trade and lower the cost of doing business. Better infrastructure will improve security, stabilise the region, and strengthen its integration with the rest of the country and neighbouring markets. Take appropriate measures to enhance private sector participation in infrastructure development, such as the provision of incentives in sectors such as housing, renewable energy, transport, and communication.”</p>
Uniquely suitable land	MDNKAP (2012)	<p>“Demand for electricity in Kenya is projected to grow at 7% per annum over the next ten years. The natural endowment of renewable energy in the ASALs is a golden opportunity to help meet this demand and build a greener economy. There are also innovative examples of energy projects in the region.”</p>
	KP&P Africa (n.d.)	<p>“Due to its unique location, between Mount Kulal and Mount Nyiru (these mountains effectively serving as a funnel), incoming winds are consistently</p>

		accelerated to average wind speeds in excess of 11 meters per second. By all measures, uniquely high numbers for a wind project”
	Vestas (2018)	“The windiest place on earth”
	IFU (n.d.)	<p>“So, what has freshly caught fish and the fight against illiteracy got to do with a wind park? The answer, which is literally blowing in the wind, is found under Kenya’s hot sun, close to the equator. 365 giant wind turbines are working non-stop and producing renewable energy to the Kenyan national grid.”</p> <p>“The wind is constantly blowing. Since last spring, the 310 MW wind park has produced power at full speed. An astonishing 150,000 MWh per month. The Lake Turkana area has strong and stable winds of 11 s/m on average. In popular terms it means that the wind turbines are producing electricity 70 per cent of the time. This is almost twice as much as many of the European onshore wind parks, which normally produce power 30-40 per cent of the time due to changing winds.”</p>
	FinnFund (n.d.)	“Exceptional wind conditions: “The experts taking the wind measurements on site initially thought that there was a fault in their equipment because the winds were so strong and steady,” he says. The study concluded that this was one of the best wind sites in the world. It is a desert valley between tall mountains, swept by exceptionally strong, predictable and unidirectional winds. The exceptional wind conditions give the wind farm a competitive edge. The load factor for the turbines on the Lake Turkana site is 60 percent on average; this compares very favourably with the European load factors averaging around 20 percent and explains why Lake Turkana can offer a competitive power price without subsidies normally seen in wind farms in Europe.”
	LTWP (2008)	“Lake Turkana Wind Power Project has been measuring wind speeds and frequency in the project area for the last 12 months at 40, 60 and 80 metres altitude. The average wind speed in the project area has been recorded to be 11 metres per second. These are among the highest wind speed averages recorded in the world.”
	LTWP (2009)	“In 2005, LTWP contracted DEWI, a leading international wind energy consulting firm to carry out extensive wind tests using a dedicated wind measuring station situated in the envisaged wind farm. Wind speed measurements were recorded every ten minutes at heights of 43, 62, 81, and 83 meters above the ground. Wind measurements revealed an impressive wind speed of 11 m/s (as compared with a high average in Europe of 7 m/s).”
	FMO (n.d.)	“LTWP will benefit from an exceptional wind resource with average wind speeds of 11.1 m/s.”

	MENR (2013)	"The Best wind areas in Kenya irrespective of economic viability is Marsabit district, Samburu, parts of Laikipia, Meru north, Nyeri and Nyandarwa and Ng'ong hills. Other areas of interest are Lamu, off shore Malindi, Loitokitok at the foot of Kilimanjaro and Narok plateau are some of the hot spots."
	MDNKAP (2012)	"The region's untapped potential"  "The energy potential of the north, from solar, wind, bio-gas and geothermal, is only now starting to be tapped."
Available land	Vestas (2018)	"The entire concession is equivalent to less than 1% of Marsabit County's total acreage with the vast majority of the land kept open to pastoralists and local communities."  "Most of the county comprises an extensive plain lying between 300 to 900 m above sea level. There are no permanent rivers with the majority of the county covered by rocky, stony and rugged lava plains with poor soil development. The land is largely arid, rainfall is low and unreliable, and droughts are frequent all of which limits crop production: only 2 percent of the county population practices crop farming and at present only 0.3 percent (5,060 ha) of the total estimated arable area (1,582,750 ha) is under food and cash crop production, with maize, sorghum, millet, beans, fruits and vegetables being the main crops."
	IFU (n.d.)	"An astonishing amount of EUR 678 million is the price of the wind park in the remote Marsabit district"
	Norfund (n.d.)	"Turbines will be placed on the 'Dry and bare ridges' in this remote area"
	LTWP (2011)	"The windfarm site is very sparsely populated (1-2 people km <sup>2</sup> )"
	LTWP (2008)	"According to population census of 1999 (Table 3), population in the Loiyangalani Division was 16,965 people with a density of 1.1 2 people per km , the lowest population density in Marsabit District. The population is now estimated to be in the tune of 20,000 people with a density of a 1.32 persons per km. The low population density in the project area is attributed to harsh climatic conditions and insecurity prevailing in the area."
	EIB (n.d.)	"The construction of the largest wind farm in Africa, in one of the most remote and inaccessible areas of Kenya, is an impressive show of expertise in logistics and engineering."
	MEP (2011)	"Only 132,000 households are in areas considered very good to excellent for wind investment which also provide good opportunity for development of large wind farms as there would be minimal human interference."