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### Phasing out Fossil Fuels

*Synergies and Trade-offs*

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#### DOI

[10.2307/jj.18377014.16](https://doi.org/10.2307/jj.18377014.16)

[10.1515/9789048560387-014](https://doi.org/10.1515/9789048560387-014)

[10.5117/9789048560370\\_CH09](https://doi.org/10.5117/9789048560370_CH09)

#### Publication date

2024

#### Document Version

Final published version

#### Published in

Leaving Fossil Fuels Underground

#### License

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[Link to publication](#)

#### Citation for published version (APA):

Gupta, J., Rempel, A., & Olofsson, M. (2024). Phasing out Fossil Fuels: Synergies and Trade-offs. In J. Gupta, B. Hogenboom, A. Rempel, & M. Olofsson (Eds.), *Leaving Fossil Fuels Underground: Actors, Arguments and Approaches in the Global South and Global North* (pp. 233-253). (Liveable Futures). Amsterdam University Press.  
<https://doi.org/10.2307/jj.18377014.16>, <https://doi.org/10.1515/9789048560387-014>,  
[https://doi.org/10.5117/9789048560370\\_CH09](https://doi.org/10.5117/9789048560370_CH09)

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## 9. Phasing out Fossil Fuels: Synergies and Trade-offs

*Joyeeta Gupta, Arthur Rempel and Malin Olofsson*

### Abstract

This chapter concludes by answering the questions: How do different actors use different arguments and approaches to engage with a fossil fuel phase-out? Which arguments and approaches grapple with the multiple trade-offs, for which actors, and why? And how can these be scaled up? The chapter identifies 10 niche arguments that need scaling up: Revisiting how development is defined, using court cases as an effective option for social movements, social movements can build on existing contextual ideas such as the rights of nature, the need for extraction moratoria, demanding compensation for stranded fossil fuel assets, emphasizing the vulnerability of exports to border tax adjustments can influence national and business policy, holding all accountable for their own climate debt, subject fiduciary responsibility to socio-ecological criteria, use philanthropic funds to decommission existing fossil fuel projects and adapt and implement OECD policy to prohibit ECA finance for fossil fuel projects.

**Keywords:** fossil fuel phase-out, scaling-up, arguments, approaches, inclusive development

### 9.1. Introduction

We have looked at the challenges of leaving fossil fuels underground through examining the different arguments and approaches that are used by different actors at different levels of governance. We focused on three levels—global

actors, regional actors and local actors in South Africa and Ecuador—posing the tri-pronged question: *How do different actors use different arguments and approaches to engage with a fossil fuel phase-out? Which arguments and approaches grapple with the multiple trade-offs, for which actors, and why? And how can these be scaled up?* In responding to this question, we have focused less on the fact that there is a huge global fossil fuel lock-in where powerful actors and national governments are highly motivated to delay the fossil fuel phase-out. Instead we have focused on positive narratives of social movements and other parties that can mobilise a global challenge to the continued use of fossil fuels.

This chapter unites the insights that have emerged from the different chapters, by linking them with the Sustainable Development Goals (see Chapter 1) and by identifying which niche activities can be scaled up to the regime and landscape levels (see Chapter 2). Our different chapters looked at various issues from diverging perspectives—from the role of social movements and courts more broadly in the Global South (see Chapter 3), to social movements and activities initiated in Latin America including Ecuador (see Chapter 4), the policy challenges in South Africa (see Chapter 5); social mobilisation and coalition forming in South Africa (see Chapter 6); the role of finance for fossil fuel investments in the Global South in the fossil fuel narrative (see Chapter 7) and the role of supply-side initiatives (see Chapter 8).

We now revisit the challenge of climate change, energy and the posed implications for development and justice. In doing so, we first elaborate on the diversity of actors, arguments and approaches that are involved in fossil fuels (see 9.1). This brings us to a discussion of environmental justice (fighting against injustice) versus legal justice (weighing the arguments of all actors using a justice perspective) issues. This requires us to move towards the inclusive development frame which uses the lens of social, ecological and relational issues to examine and critique economic issues (see 9.2). We then link this to the Sustainable Development Goals building on our framework in Chapter 1 to highlight the synergies and conflicts (see 9.3). Such a frame also enables us to identify key ideas, narratives and tools that need to be scaled up to enable a just process towards leaving fossil fuels underground (see 9.4). Finally, we integrate our disparate strands of analysis into our analysis of transition processes (see 9.5) before drawing conclusions.

We acknowledge that we take a broad North–South approach in this book, while we recognise that there are many nuances to the storyline, which we bring out as and when we see that as necessary.

## 9.2. Actors, arguments and approaches

Our research has focused on three key actors—social movements, the large investors and governments in the Global South. We did not look at other actors such as labour movements and epistemic communities but complement our analysis in this section by building on the relevant literature.

### 9.2.1. Social movements and NGOs

A key actor at local to global level are NGOs and social movements. NGOs are organised formal bodies with a secretariat while social movements coalesce around specific themes. The latter can be generated by NGOs or they may grow to include NGOs. Their arguments with respect to fossil fuel can be clustered into four storylines: (a) the impacts of extraction, production and use affects local communities either through a direct loss of livelihoods or through damaging their environment and resources and thereby also affecting their health; this has been used to mobilise grievances locally to create a social movement (see Chapters 3 and 6); however, this can also be affected by loss of jobs in the fossil fuel sector; (b) these primary arguments have been supported by other arguments including that of the global problem of climate change; climate change has not been the motivating arguments in these movements; (c) these arguments have been used also to merge with other ongoing struggles of peasants, Indigenous communities and women (see Chapter 4); and (d) some social movements have revolved around specific ideas such as the Yasuni–ITT Initiative (see Chapters 1, 3, 8) and the climate debt of countries (see Chapter 5); where the former focuses on receiving compensation from the North for leaving fossil fuels underground and the latter on the climate debt incurred by taking fossil fuels out.

In terms of approaches, social movements have engaged in activities ranging from public education campaigns, naming and shaming, lobbying and litigation, and violence/“blockadia” activities in relation to LFFU. Education campaigns focus on mobilising critique of dominant development paradigms, neo-extractivist strategies, economic and ecological debt and the promotion of alternative visions. Lobbying and litigation to mobilise state and other actors have included demanding the closure of fossil fuel activities and change in fossil fuel policy. The former takes precedence over the latter. Such activities have taken place where there is civic space in more democratic countries. Where there is less civic space, petro-violence and

“blockadia” activities have been more dominant but there is less evidence as to whether this actually leads to a change in policy by itself (see Chapters 3–6).

Some social movements in the Global South have been successful, such as the public demand for a moratorium on oil exploration and extraction as in Costa Rica and the petroleum moratorium in Belize waters. Social movements tend to be successful when they can mobilise local people by focusing on their local and immediate interests such as their livelihoods, their environment and their health. They can also make links to existing grievances of these communities. Global issues then piggyback on such interests. However, social movements tend to be more successful when the economic losses of local people outweigh the economic losses of the other party—a point we return to later.

Where social movements and other actors have used the courts, they have often been more successful in closing down fossil fuel projects and/or in demanding policy change (see Chapter 4). Factors influencing the use of courts in the Global South include the degree to which a society is democratic (which enables actors to question state action), the degree to which a society has developed institutions (which ensures a functioning judiciary and the ability of social actors to prepare a court case), and the degree to which a country emits greenhouse gases (which creates a stronger need for action). We did not find a clear link between countries that were more or less vulnerable to the impacts of climate change and the number of court cases.

### **9.2.2. Investors and financiers**

We now turn to another key actor—those who both finance and invest in fossil fuel projects. The former typically concerns financial bodies that issue credit (i.e. loans) to companies or projects that drive fossil fuel extraction or production projects; these can include commercial banks, development banks or various other types of public finance institutions (PFIs). Meanwhile, the latter typically refers to shareholders that make equity investments in companies that produce fossil fuels; these can include pension funds, insurance companies or several other types of institutional investors. In this book, we have studied philanthropic organisations, pension funds, and investor initiatives in terms of investors, and export credit agencies (ECAs).

We find that while philanthropic organisations admittedly aim at spending their grants on some climate mitigation and adaptation projects that

ostensibly adhere to the Paris Agreement objectives, the source of this grant funding (i.e. their investment portfolios) contradictorily does not exclude or prohibit investments in fossil fuel extraction and production firms, revealing a concerning incoherence between their investment and philanthropic agendas. This therefore questions the extent to which philanthropic foundations are to any degree effective in promoting a fossil fuel phase-out; that is, how can an organisation successfully support a cause, such as climate mitigation via LFFU, if the means by which it supports this cause relies (potentially quite heavily) on investments that paradoxically drive and exacerbate the very problems they aim to “solve”? Our research has made but a small dent in studying how philanthropic foundation investments resonate with or destructively inhibit their missions and purposes; further research is urgently merited, perhaps using more in-depth case study methodology to unpack the nuances and justifications for these apparent discrepancies. This is particularly vital given how the “philanthrocapitalism” paradigm continues to make headlines around the world (Giridharadas, 2018); with figures like Jeff Bezos “donating \$10 billion to a climate fund” (Clifford, 2021) should we be rejoicing, or is this all a façade?

Regarding pension funds, their primary and self-assigned responsibility is their fiduciary responsibility to their shareholders; that is, their investment decisions are first and foremost driven and justified by the extent to which such decisions will benefit or detract from the *financial* well-being of their existing and future pensioners. Although many pension funds have established sustainability offices and have pledged to align their investment activities with some form of environmental, social and governance agendas, their outdated internalisation of this fiduciary duty has rendered them incapable of taking effective climate mitigation action that could result in a loss (or simply not as high of a gain) for their shareholders. Debates about whether pension funds (and other institutional investors) should divest from or engage with fossil fuel companies have been running rampant for at least a decade, but our research shows that not only are these approaches ineffective for LFFU (Rempel & Gupta, 2021), but that these actors are not even willing to entertain them to greater extents if it means sacrificing a return on their investment. This poses a dilemma, particularly given that effective climate mitigation via LFFU cannot be fallaciously understood as a “win-win”; there is a bill to pay to phase out fossil fuel dependence, and someone(s) must “lose” in paying this bill—who will it be?

Investor initiatives were subsequently explored, which differ slightly from the above two actor groups, mainly because they are themselves coalitions of investors that may include both pension funds and philanthropic organisations. However, we could see these initiatives as stand-alone actors, namely because of the power that they may wield in swaying fossil fuel firm behaviour by conglomerating their assets under management and exploiting their joint leverage over the companies in which they invest. Although this is a tremendously under-explored field that merits much more forthcoming research, our preliminary study suggests that these initiatives are not even beginning to make the best use of their potential, and have thus far played more of a greenwashing role than anything else, forming the illusion that institutional investors are taking effective climate action, while in reality they allow said investors to delay phasing out fossil fuels as they scramble to decide to whom to pass on the hot potato of fossil fuel assets that may suddenly evaporate.

Export credit agencies (ECAs) are a unique type of PFI; they are typically one financial arm of a government, and financially support domestic companies who seek to conduct business abroad by offering either credit (i.e. loans, debt) or guarantees (i.e. insurance). Their role in doing so cannot be sufficiently stressed; if commercial banks are uncomfortable with the financial risks posed by a new fossil fuel project, an ECA (or other PFI, for that matter) can step in and de-risk the project, mobilising finance for a project that may not have otherwise been available. Most OECD ECAs have continued to fund fossil fuel projects abroad, particularly in the Global South, though this is on the decline—particularly in the case of thermal coal mining and combustion projects. This effectively means that between 2010 and 2020, ECAs from the Global North have hoisted and generated fossil fuel infrastructure in the Global South—the very infrastructure that is incompatible with the objectives of the Paris Agreement and must be decommissioned as soon as possible to avoid further lock-in in the Global South. There is considerable work to be done in ensuring financial coherence in this field as this is not a simple task. Not making new investments in fossil fuels is the easiest. But those who have financial stakes in the fossil fuel sector have two choices—to phase out such investments by selling the stakes or to engage with their debtors to ensure that they transition out of fossil fuels. Each of these choices is problematic—the first ensures that the financier is stable, but creates new vested interests; and the second shifts the responsibility to the party borrowing the money or invested in.

### 9.2.3. Governments

The government narrative on the side of the Global South can be clustered into three storylines. The first, is the multidimensional sacrifices (e.g. the loss of energy, jobs, income, and spillover effects on the economy) involved in leaving fossil fuels underground which either imply investing in fossil fuels and making profits in the short to medium term (as is illustrated in Chapter 5); not investing in the fossil fuel sector and calling for compensation as is demonstrated in Chapter 8; and finally not investing in fossil fuels and accepting that it will be a stranded asset as many social movements appear to want (see Chapters 3, 4 and 6). All this falls under the right to development. The second, is the strategic adoption of key demand and supply-side policies to LFFU—which implies focusing on improving energy efficiency and shifting to alternative fuels; and, third is the fear that trade restrictions will force a shift away from fossil fuels as is illustrated in Chapter 5. Some of the choices in South Africa reveal corrupt practices of vested interests in government where those who have interests in the fossil fuel sector try to mobilise policy in their favour (see Chapter 5).

Foreign governments from the European Union, Japan and the United States are potential key actors—by being financiers of projects (e.g. through export credit) and by using border tax adjustments. Such border tax adjustments could affect South Africa's (and all other developing countries') abilities to engage in trade with the European Union or other country that applies such an adjustment when the products and services exported are produced using fossil fuels. The government narrative on the side of the Global North can be clustered around: (a) limiting the risk of stranded LFFU assets through e.g. continued use of fossil fuels at home and export credit to fossil fuel firms; (b) the strategic use of demand and supply-side options, and (c) using trade restrictions to force the rest of the world into compliance. With the war on Ukraine (see Box 9.1) and reduced supplies of fossil energy to the Global North, there appears alas to be a return to investments in, and subsidies for, fossil fuels. The choices in the Global North may not necessarily be attributed to corruption but do reveal incoherent policies. This raises questions regarding whether the policy results from a necessity to invest in fossil fuels, or whether the vested interests in the fossil fuel sector are shaping national policy—either directly by being in political positions or indirectly through the use of their power and possibly pay-offs. Those with vested interests in the fossil fuel sector are also powerful and will use legal and quasi-legal ways to ensure the future of fossil fuels.

### Box 9.1. The war against Ukraine

Russia's war against Ukraine since February 2022 has caused a global energy crisis, with demand exceeding supply and a sharp increase in prices worldwide (Tollefson, 2022). As the largest exporter of natural gas and second-largest exporter of crude oil globally (UN Global Crisis Response Group on Food, Energy and Finance, 2022), the European Union depended on Russia for approximately 40% of its oil and gas supply (Campbell, 2022a and 2022b), and other European countries were more heavily reliant (Tollefson, 2022). However, as European countries imposed economic sanctions on Russia (Obisie-Orlu, 2022) this necessitated subsidising energy prices and searching for alternative energy sources to close the gap (Butler, 2022), for example, through oil and gas imports from Qatar, Algeria (Butler, 2022), Israel (Ghiles, 2022), Egypt (Fisher, 2022), Mozambique, Libya, and Morocco (Ghiles, 2022), Angola (Campbell, 2022a), Senegal (Vyshnytska, 2022), Congo (Campbell, 2022a), Azerbaijan (Kuzemko et al., 2022), Nigeria (Ruta, n.d.) and Mexico (Chepeliev et al., 2022); and thermal coal imports from South Africa and Indonesia, which increased more than 11-fold since the war (Kumar & Levitan, 2022).

Consequently, the war may delay the clean energy transition in the Global South (Tollefson, 2022), "not least by creating incentives, directly or indirectly, for investment in coal, gas and associated supply chains" (Kuzemko et al., 2022). In this regard, a recent Memorandum of Understanding between Afreximbank and the African Petroleum Producers' Organization (APPO) aims to create an African Energy Transition Bank to finance oil and gas projects on the continent (Obisie-Orlu, 2022), while other actors may invest as much as \$100 billion in oil and gas projects in Africa (Kumar & Levitan, 2022). The war may, thus, ironically send signals for increasing, rather than decreasing, investments in fossil fuels. Further, Russia is now exporting its excess supply of fossil fuels to the Global South such as India, China and Turkey, while at least during the initial months, Japan, South Korea, and Taiwan maintained significant imports of fossil fuels from Russia (Nadig, 2022).

#### 9.2.4. Implications for environmental justice, legal justice and inclusive development

Thus, there are a range of narratives that are brought forward by different actors. Here we make the following points: (a) we differentiate between environmental justice and legal justice; (b) we argue that legal justice may weigh in favour of economic arguments; (c) unless we are able to convincingly use an inclusive development and justice framework to re-examine the economic arguments.

Environmental justice movements protest against injustices; they fight against the way in which environmental damage affects their current or future lives and livelihoods. Using the courts is an effective way for them to ensure a *niche* change, and maybe even a *regime* change. However, courts look at justice in a slightly different manner; they weigh the pros and cons of the justice issues related to all actors. They will look at the arguments of social movements, scientists, labour groups, investors and so on to come to a balanced decision based on all the issues concerned. In such a decision, a key question is: Will the economic losses prevail over the socio-ecological gains of LFFU; or will science and social movements prevail against the economic issues? The courts will weigh the trade-offs mentioned above.

And this brings us to a discussion of justice and inclusive development. If social, ecological and economic issues are to be weighed against each other, the short- to medium-term economic issues will prevail. Inclusive development therefore calls for weighing social, ecological and relational issues against each other and then looking at the economic dimensions (see Chapter 2); in other words, inclusiveness is not an adjective to development, it redefines development (Rammelt & Gupta, 2021).

Inclusive development calls for examining social, ecological and relational issues. In relation to each we focus on just access and just allocation. Within the *social* domain, just access implies looking at (i) income/jobs above the poverty line; (ii) access to water, food, energy, health, housing and infrastructure; (iii) access to procedural rights including non-discrimination, rights of minorities, women, developing countries; and rights to information, decision-making, recognition and courts. Just allocation examines (i) socio-economic resources (e.g. fossil fuel resources) and infrastructures; (ii) socio-economic risks; and (iii) socio-economic responsibilities.

Within the *ecological* domain, just access includes NCPs—material, non-material, regulating (all with a cultural component)—for the most marginalised to be able to access (i) income; (ii) healthy lives; and (iii) environmental rights. Just allocation refers to the distribution of the: (i) remaining NCPs; (ii) related risks; and (iii) environmental responsibilities.

Within the *relational* domain, we are examining the role of states (and interstate relations) and their ability to provide and/or protect social and ecological common goods, and to address inequalities; the role of other actors, including financial actors and their desire for maintaining the status quo, and social movements and their desire for change; and the role of dominant and alternative approaches and arguments in shaping the adoption of substantive and procedural principles, rights and responsibilities to address socio-ecological justice. These elements have been combined for our

analysis below in Section 9.3. Since such inclusiveness requires redefining development, we return to this in Section 9.4.

### 9.3. Multidimensional trade-offs

In Chapter 1, we identified four clusters of issues that could be relevant for looking at the implications of LFFU and the SDGs. We now discuss these in the light of some of the arguments that have surfaced throughout this research. This is based on looking at justice in terms of *access* to basic needs, as specified in the SDGs, and the *allocation* of resources, risks and responsibilities (Gupta & Lebel, 2020a, 2020b).

#### 9.3.1. Basic resources and jobs

First, in terms of jobs/income, social movements have mobilised grievances and tended to protest against the impacts of energy-related pollution on the environment which then affected their livelihood prospects (see Chapters 3 and 6). Since in many countries there has been no active discussion of phasing out existing fossil fuel plants, but rather the emphasis has been on new extraction and new to-be-built fossil fuel plants, workers in the fossil fuel industry have not yet protested actively. However, if such a phase-out begins, there will be a major backlash from the labour movements and calls for a just labour transition are growing worldwide (see Chapter 6).

#### 9.3.2. Energy

Second, the SDGs aim to ensure that people, especially those living in energy poverty, have access to affordable, reliable and modern energy. This narrative did not emerge strongly in our research, but this may have been because (a) we did not conduct interviews with those with limited access; (b) these people are not organised within social movements demanding energy access; and (c) there is an assumption that renewable energy will provide the decentralised access to affordable, reliable and modern energy for these communities. (Our field work has been seriously affected by COVID-19.) While the latter is certainly the hope, there is considerable doubt about the availability of battery systems to ensure access to renewables at affordable prices for people worldwide. In our mind, there is no doubt that this is a key social issue that needs to be addressed.

### 9.3.3. Nature's contributions to people

Third, when discussing nature's contributions to people (NCP), social movements are organising to protest against the damage caused by fossil fuel-related activities to their environment. However, it is clear that investors, producers, users and governments see that the economic benefits of using the provisioning services of these resources outweighs the damage to the supporting, regulating and cultural services that these resources provide.

### 9.3.4. Procedural issues

Fourth, in terms of procedural issues, local actors and social movements increasingly have access to information and courts (at least in democratic countries), if not to processes of decision-making. These have often been complemented by petro-violence and "blockadia" approaches. The fossil fuel labour movements appear not to have organised themselves yet. Energy-poor communities also are not yet organised to demand procedural rights.

We then look at issues related to socio-ecological *allocation* in terms of inequality; production and consumption patterns; North–South issues; and the right to development.

### 9.3.5. Inequality

Energy use has been critical to the development of Western society since the Industrial Revolution and the development of the steam engine. While historically these gains were not equitably shared in society as illustrated by the books of Charles Dickens among others, with growing democracy, the gains from energy use have been shared in many parts of the industrialised world—for example in the Netherlands and Norway. However, in the developing world the paradox of plenty has often been a resource curse causing uneven development and exacerbating inequality. It has often led to state monopolies or collusion with companies in corporate endeavours that could often be labelled as state corporate "corruption." Furthermore, more research needs to be undertaken on the limits to energy use, the overuse of energy resources by some and the underuse by others. However, our research shows that shareholders in the energy sector in Africa are predominantly from other parts of the world (except in the case of South Africa; see Chapter 5). This would imply that the profits from using fossil fuel flow elsewhere while the risks are borne by local communities.

### 9.3.6. Production and consumption

Our research in the Global South shows that production, consumption and the use of fossil fuel resources is on the rise, as is their use of renewables. This shows a growing fossil fuel lock-in in the Global South; moreover, loans for financing such extraction are being taken from international banks and this could also imply a growing debt crisis. The war on Ukraine has led to increased investments in the Global South in fossil fuels. Since companies have instrumental, structural and discursive power (see Chapter 2), they are in a better position to control the agenda.

### 9.3.7. North–South issues

We took a limited look at the role of Western countries in terms of their investments and production and consumption patterns vis-à-vis the South and conclude that Western investors (a) continue to invest in fossil fuels in the Global South, although this is decreasing; (b) continue to dump know-how, technology and infrastructure onto the South now that it is clear that fossil fuels need to be phased out (see Chapter 7); (c) continue to extract resources from the Global South (the neocolonial disease à la Coronil [2008]); and (d) extract profits from their fossil fuel investments in the Global South. This is very much in line with dependency theory, which argues that the South is both a source of resources and a dumping ground of old technologies and approaches. Some countries in the Global South are also behaving in a similarly predatory fashion—but this is an area of further research.

### 9.3.8. The right to development

The right to development and energy did not emerge as a dominant theme in this research; however, there is a growing literature on this theme and our regular meetings with African stakeholders tended to emphasise this. Essentially, energy is needed for development; in the past countries used their fossil fuels to become rich quickly. Given that the bulk of the remaining fossil fuels is in the developing world and up to 80% of the fossil fuels need to be kept underground, this de facto leaves the burden of leaving fossil fuels underground to the developing world; this leaves them with massive stranded resources and assets. The global community had begun to discuss how greenhouse gas emissions should be shared between countries but since the Conference of the Parties in Copenhagen in 2009, this discussion has

been shelved in favour of allowing countries to voluntarily determine what they will do. In the meanwhile, the window of opportunity for reducing emissions is shrinking fast, de facto, shifting the responsibility for such action to the developing world. This has been accompanied by the “right to promote sustainable development” in the Climate Change Convention (UNFCCC, 1992). It is no wonder then that the developing countries have retaliated by demanding the “right to development” in the Paris Agreement (2015) and Agenda 2030 (UNGA, 2015) as also “full permanent sovereignty” which in theory guarantees them the right to use their fossil fuels under resource nationalism arguments. However, in our view, there needs to be further discussion between countries to achieve a more just result, because there is no way to ensure that developing countries close their fossil fuel enterprises.

In terms of economic issues, this research shows that the short- to medium-term economic value of the fossil fuel enterprise is far in excess of the perceived damage to nations as a whole of shifting to a non-fossil-fuel world. This requires a different perspective on how to govern such a phase-out (see Table 9.1).

We conclude that the most significant synergies in phasing out fossil fuels arises from the social and environmental movements that build on the environmental damage of fossil fuels to their local context and their livelihoods. However, there are far greater trade-offs involved. These trade-offs (a) involve the need for quick, non-intermittent, reliable and affordable energy that can power an economy and raise huge income for a state and that underlies resource nationalism in all countries whether from the Global South or North. Sometimes (b) these nations have taken out huge loans that have to be paid back and that makes it difficult to phase out these activities. Sometimes (c) these nations are influenced by rich actors who are from the fossil fuel industry, and this can include both pressure that is both legal and activities that are extra-legal or corrupt. At the same time, (d) there is a huge army of employees in the fossil fuel sector who run the risk of unemployment if the sector collapses. Finding alternatives for these people in the areas in which they live may not be easy. And communities, households, commuters and others are dependent daily on the fossil fuel economy to cook their food, power their lamps and bring their produce to the market. Revamping the system will not be easy. Our social movement success stories show that it is easier to mobilise policy change at national level when the economic interests of the social movement is higher than the economic interest of the producing partners at the time of discussion (see Chapter 3; Muttitt & Kartha, 2020, p. 4).

**Table 9.1. Actors, arguments and approaches and the Sustainable Development Goals**

	Issues	Actors, arguments, approaches	
Justice issues	Socio-ecological access	Jobs/ income (energy related)	Social movements protest against the impact of fossil fuels on their livelihoods and are successful when these economic losses outweigh other economic concerns; Labour movements are likely to resist losing jobs in the fossil fuel sector, there is growing policy concern on this issue, but more research needs to be undertaken on a just labour transition.
		Services (affordable, reliable, modern energy)	People in energy poverty need such access; they are not organised in social movements, nor do they go to courts for the violation of their energy access rights (as they do for water and sanitation rights); the unanswered question is whether there is enough potential in renewable energy to meet the needs of the poor in a decentralised manner.
		NCPs (energy extraction, production, use & impacts on NCPs)	Social movements protest against fossil fuel extraction, production and use because of the negative impacts on their resources and consequently their health. Investors, producers, users, and governments apparently weigh the use of provisioning resources higher than the impacts on their regulating, supporting and cultural services.
		Procedural rights	Communities and social movements have access to information and courts (at least in democratic societies), if not to decision-making processes. Labour movements appear not to have organised themselves yet. Energy-poor communities also seem to not have availed of their rights to energy.
	Socio-ecological allocation	Inequality (energy related inequalities)	The gains from energy use have been shared in many parts of the industrialised world; but in the developing world the paradox of plenty has often been a resource curse causing uneven development and exacerbating inequality. Furthermore, more research needs to be undertaken on the limits to energy use, the overuse of energy resources by some and the underuse by others. However, our research shows that shareholders in the energy sector in Africa are predominantly from other parts of the world (except in the case of South Africa). This would imply that the profits from using fossil fuels flow elsewhere while the risks are borne by local communities.
		Production/ consumption/ use patterns	Our research in the Global South shows that production, consumption and use of fossil fuel resources is on the rise, as is their use of renewables. This shows a growing lock-in in the Global South; moreover, loans for financing such extraction are being taken from international banks and this could also imply a growing debt crisis.
		North–South energy issues	We examined Western countries only in relation to the investments, production and consumption patterns in the South and conclude that Western investors continue to invest in fossil fuels in the Global South.
		Right to energy & development	The right to development and energy did not emerge as a dominant theme in this research; however, there is a growing literature on this theme.
	Economy	Economy & energy	This research shows that the short- to medium-term economic value of the fossil fuel enterprise is far in excess of the perceived damage to nations as a whole of shifting to a non-fossil-fuel world. This is seen as resource nationalism. This requires a different perspective on how to govern such a phase-out.

### 9.4. Scaling-up approaches and arguments

This book has raised a number of ideas and approaches that could be scaled up (or rather, pursued) to promote more effective climate action via LFFU. We discuss these below.

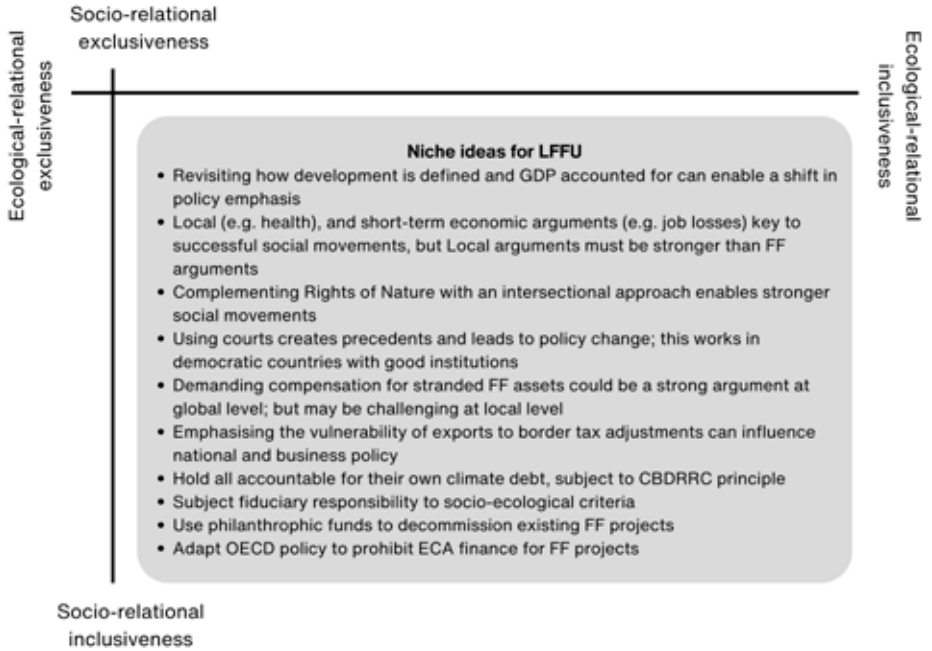


Figure 9.1. Socially and ecologically inclusive niche ideas.

*Revisiting how development is defined and GDP accounted for can enable a shift in policy emphasis.* There is growing evidence that infinite growth is not possible, and that GDP is poor in representing social and ecological damage. Despite this, countries in the Global North and South emphasise GDP growth and as long as that is the single most important indicator of a country, countries may continue to invest in fossil fuels. There are many alternatives to GDP; culture-based alternatives such as *ubuntu*, *buen vivir* and gross national happiness, but also more science-based alternatives such as inclusive wealth and inclusive development. The concept of *buen vivir* has been adopted in the Constitution of Ecuador and promotes harmonious coexistence with nature. What is critical is that these are not colonised by dominant neoliberal capitalist thinking.

*Local (e.g. health) and short-term economic arguments (e.g. job losses key to successful social movements), but local arguments must be stronger than fossil fuel arguments (mobilising grievances).* Given the dominance of neoliberal capitalist thinking, it is vital that social and environmental leaders and movements learn from each other. Chapter 3 presents a range of lessons can enable such leaders to mobilise grievances. Such movements need to build on other existing social and environmental movements so that they are not single issue movements but have a more comprehensive story. In Latin America the movements are coalescing around issues of gender, ethnicity and the environment (see Chapter 4). While such movements can use extra-legal approaches, we believe that the use of courts is a more useful way of pushing their arguments forward.

*Complementing the rights of nature with an intersectional approach enables stronger social movements.* In many parts of the world, the rights of nature are being recognised by social movements, courts and even the law. The right of the river has been recognised in different contexts in Latin America, Asia and even New Zealand. The rights of nature are also being recognised such as in the 2008 Constitution of Ecuador where Article 71 recognises the right of nature or Pachamama (Mother Earth) to exist, regenerate and fulfil its cycles. Combining these with other social movements creates a large public base.

*Extraction moratoria.* Across the world, there is a rise in moratoria on extraction of different kinds of fossil fuels. In the developing world, we see such decisions banning various kinds of fossil fuel extraction (as in Argentinian municipalities, Costa Rica and Belize) (see Chapters 3 and 4).

*State–corporate corruption and crime.* This book has hinted at state–corporate corruption and crime. In some countries such collusion is seen as explicitly corrupt, in other countries such collusion is often condoned. We do not see state–corporate collusion as something exclusive to the developing world. There is considerable collusion between large companies and states in the industrialised countries and these activities need to be put under the research spotlight.

*Using courts creates precedents and leads to policy change; this works in democratic countries with good institutions. Demanding compensation for stranded fossil fuel assets could be a strong argument at global level but may be challenging at local level.* For many developing countries, the right to development combined with the fact that they have scarcely emitted greenhouse gases so far leads them to call for climate compensation. Similar arguments have been made in the past by academics, the OPEC countries and others. The argument of the industrialised countries is that there is no

end to making such compensation in terms of both the number of countries and in terms of the number of countries to which such compensation may be due. This demand has been made at COP27; the question is: Will there be enough funds to compensate for all the loss and damage? Some of our chapters have shown that creative thinking about the role of the large investors could find new funds for such compensation.

*Emphasising the vulnerability of exports to border tax adjustments can influence national and business policy.* Countries that export heavily to the EU may lose income if border tax adjustments become a reality. This could be used as an argument to convince such countries to move away from fossil fuels.

*Hold all accountable for their own climate debt, subject to the common but differentiated responsibilities (CBDR) principle.* Every country that continues to emit greenhouse gases creates a climate debt. Chapter 5 shows what the climate debt of South Africa looks like. The notion that every country has some degree of liability vis-à-vis others may change the cost-benefit analysis that many countries undertake in their analysis of energy.

*Subject fiduciary responsibility to socio-ecological criteria.* Many investors claim that fiduciary responsibility to their shareholders precludes active consideration of the socio-ecological criteria. The question is whether social movements should demand that such fiduciary responsibilities should be made subject to such criteria.

*Use philanthropic funds to decommission existing fossil fuel projects.* Philanthropies often earn from fossil fuels and spend money on adaptation. The question is whether philanthropic funds could be used to decommission existing fossil fuel projects or to compensate fossil fuel asset holders for not using these assets, and the conditions under which this would work.

*Adapt OECD policy to prohibit ECA finance for fossil fuel projects.* Although there is a clear shift in Western policy on export credit for fossil fuels, there are many exceptions to these policies. A stricter policy in this area is desirable and could be scaled up.

## 9.5. Conclusion and future research

This book set out to tackle the hugely complex question of climate change and the nuances and intricacies of equitably phasing out fossil fuels in a bid to drive effective climate mitigation. This problem is a wicked and tremendously challenging one in nature, both directly and indirectly relying on and concerning not only fossil fuel exploration and production firms, but

also their financiers and investors, governments and policymakers, direct and indirect fossil fuel dependents, and civil society in both the Global North and Global South. Nevertheless, we believe that this book draws some new insights that could be used to catalyse vital and niche studies to better grapple with the intricacies of phasing out fossil fuels.

First, the Global North has been so slow to phase out its fossil fuel, and indeed following the war on Ukraine is even investing in new fossil fuel sources, that it has left very little space for the Global South to use its own fossil fuels. Moreover, the Global North continues to invest in fossil fuel in the Global South through a range of different investment options which serves to lock-in the Global South into a fossil fuel economy, while profits are made by investors.

Second, the fundamental contradictions between the short-term gains from using fossil fuels which often outweighs the short and long-term losses from fossil fuel uses tends to motivate political actors and investors with short-term horizons to focus on the short-term gains at the cost of all else. This is often done by using arguments such as supporting the right to development, meeting the needs of the poorest, fiduciary responsibilities, the need to pay back loans, the need to have a higher GDP, etc. All these arguments need to be tackled if the short-term prioritisation is to be reversed. Our analysis showed that export credit agencies (ECAs) from Europe and North America (i.e. the Global North) have aggressively hoisted coal, oil and gas projects across South Africa and Ecuador over the last decades, and plenty of research indicates that other public finance institutions (PFIs) have continued to do so across the entirety of the “Global South” (OCI, n.d.). Now, in the wake of the looming climate emergency, should these PFIs—and the private financiers (i.e. commercial banks) that have jointly hoisted these projects—allocate concessional finance (or perhaps even grants and outright debt relief) to decommission this dirty infrastructure? The Asian Development Bank’s Energy Transition Mechanism (ETM) is beginning to dabble with the idea of mobilising a fund that first and foremost is set out to decommission the bulk of Indonesia’s coal-fired power infrastructure (Asian Development Bank, 2022) rather than blindly investing in solar PV or wind power development, the latter of which has been the trend since the inception of the Paris Agreement (and arguably even predating it).

Third, social movements are key actors in reversing this. But while social movements generally focus on local challenges and global issues piggyback on these, they are not successful in countries where the civic space is limited, where courts are conservative and where they cannot also address the

challenges of other losers—such as labour in the fossil fuel sector and users of fossil fuels. The rise in popularity of the Fossil Fuel Non-Proliferation Treaty Movement, not covered in this book, shows that there is a growing global movement that complements the local social movements.

All in all, the arguments, actors and approaches relevant to a prospective fossil fuel phase-out are ample. This book has drawn from useful findings, but what is most evident is the need for a more innovative and critical paradigm shift at the structural level. NGOs and social movements are playing their part, adopting multidimensional strategies to challenge and oppose fossil projects in their own domains (see Chapters 3 and 4), but governments, policymakers, investors and financiers seem stuck in their “old ways of getting this done.” Times have changed, the climate (and, de facto, humankind) is in a state of emergency, and it’s time that the world’s leaders and the heads of financial markets evolve appropriately, particularly if we are to have any chance whatsoever of “[m]aking finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” (Paris Agreement, 2015, Article 2.1c).

## References

- Asian Development Bank. (2022, November 14). Energy Transition Mechanism (ETM). <https://www.adb.org/what-we-do/energy-transition-mechanism-etm>
- Butler, N. (2022, July 14). The impact of the Ukraine war on global energy markets. Centre for European Reform. <https://www.cer.eu/insights/impact-ukraine-war-global-energy-markets>
- Campbell, M. (2022a, March 16). From Angola to the US: Which countries can wean Europe off Russian gas? *Euronews*. <https://www.euronews.com/green/2022/03/16/from-angola-to-the-us-which-countries-can-wean-europe-off-russian-gas>
- Campbell, M. (2022b, April 27). What are Europe’s energy alternatives now that Russian gas is off the cards? *Euronews*. <https://www.euronews.com/green/2022/04/27/europe-scrambles-to-keep-the-lights-on-as-it-sidelines-russian-gas>
- Chepeliev, M., Maliszewska, M., & Seara e Pereira, M. F. (2022, May 6). Agricultural and energy importers in the developing world are hit hardest by the Ukraine war’s economic fallout. Centre for Economic Policy Research (CEPR). <https://cepr.org/voxeu/columns/agricultural-and-energy-importers-developing-world-are-hit-hardest-ukraine-wars>
- Clifford, C. (2021, November 4). Bezos Earth Fund CEO: Here’s how we’re giving away \$10 billion of Jeff’s money. *CNBC*. <https://www.cnbc.com/2021/11/04/bezos-earth-fund-ceo-how-were-giving-away-10-billion.html>

- Coronil, F. (2008). It's the oil, stupid! *Revista: Harvard Review of Latin America*, 8(1), 19–20. <https://revista.drclas.harvard.edu/its-the-oil-stupid-an-overview/>
- Fisher, J. (2022, June 8). Climate change: Ukraine war prompts fossil fuel “gold rush.” *BBC News*. <https://www.bbc.com/news/science-environment-61723252>
- Ghiles, F. (2022, July). As North African energy links are redrawn, Italy becomes Europe's southern gas hub. Barcelona Centre for International Affairs (CIDOB). [https://www.cidob.org/en/publications/publication\\_series/notes\\_internacion-als/276/as\\_north\\_african\\_energy\\_links\\_are\\_redrawn\\_italy\\_becomes\\_europe\\_s\\_southern\\_gas\\_hub](https://www.cidob.org/en/publications/publication_series/notes_internacion-als/276/as_north_african_energy_links_are_redrawn_italy_becomes_europe_s_southern_gas_hub)
- Giridharadas, A. (2018). *Winners take all: The elite charade of changing the world*. Knopf.
- Gupta, J., & Lebel, L. (2020a). Access and allocation in earth system governance: Lessons learnt in the context of the Sustainable Development Goals. *International Environmental Agreements: Politics, Law and Economics*, 20, 393–410. <https://doi.org/10.1007/s10784-020-09486-4>
- Gupta, J., & Lebel, L. (2020b). Editorial Access and Allocation in Earth System Governance. *International Environmental Agreements: Politics, Law and Economics*, 20, 197–201. <https://doi.org/10.1007/s10784-020-09485-5>
- Kumar, N., & Levitan, D. (2022, November 3). War in Ukraine is driving a return to coal and a rush to renewables. *Grid News*. <https://www.grid.news/story/global/2022/11/01/russias-war-in-ukraine-is-driving-a-rush-for-renewables-and-for-coal-heres-what-that-means-for-the-planet/>
- Kuzemko, C., Blondeel, M., Dupont, C., & Brisbois, M. C. (2022). Russia's war on Ukraine, European energy policy responses & implications for sustainable transformations. *Energy Research & Social Science*, 93, 102842. <https://doi.org/10.1016/j.erss.2022.102842>
- Muttitt, G., & Kartha, S. (2020). Equity, climate justice and fossil fuel extraction: Principles for a managed phase out. *Climate Policy*, 20(8), 1024–1042. <https://doi.org/10.1080/14693062.2020.1763900>
- Nadig, S. (2022, October 3). Before and after: How the Ukraine crisis has affected Russian oil analysis. *Offshore Technology*. <https://www.offshore-technology.com/analysis/before-and-after-how-the-ukraine-crisis-has-affected-russian-oil/>
- Obisie-Orlu, V. (2022, June 2). Exploring key implications of the Russia–Ukraine war on Africa's energy policy. Africa Policy Research Institute. <https://afripoli.org/exploring-key-implications-of-the-russia-ukraine-war-on-africas-energy-policy>
- OCI [Oil Change International]. (N.d.). Shift the Subsidies Database: Public finance still funding fossils. <https://priceofoil.org/shift-the-subsidies/>
- Paris Agreement. (2015). (Adopted on 12 December 2015, entered into force 4 November 2016), United Nations Treaty Series vol. 3156 C.N.63.2016.

- Rammelt, C. F., & Gupta, J. (2021). Inclusive is not an adjective, it transforms development: A post-growth interpretation of inclusive development. *Environmental Science & Policy*, 124, 144–155. <https://doi.org/10.1016/j.envsci.2021.06.012>
- Rempel, A., & Gupta, J. (2021). Fossil fuels, stranded assets and COVID-19: Imagining an inclusive & transformative recovery. *World Development*, 146, 105608. <https://doi.org/10.1016/j.worlddev.2021.105608>
- Ruta, M. (N.d.). How the war in Ukraine is reshaping world trade and investment. World Bank Blogs. <https://blogs.worldbank.org/trade/how-war-ukraine-reshaping-world-trade-and-investment>
- SEI, IISD, ODI, Climate Analytics, CICERO, and UNEP. (2019). *The production gap: The discrepancy between countries' planned fossil fuel production and global production levels consistent with limiting warming to 1.5 °C or 2 °C*. <http://productiongap.org/>
- Tollefson, J. (2022, April 5). What the war in Ukraine means for energy, climate and food. *Nature*, 604, 232–233. <https://www.nature.com/articles/d41586-022-00969-9>
- UNFCCC [United Nations Framework Convention on Climate Change]. (1992). (Adopted in 1992, entered into force 21 March 1994), 1771 UNTS 197 (UNFCCC).
- UNFCCC [United Nations Framework Convention on Climate Change]. (2015). Adoption of the Paris Agreement. Report No. FCCC/CP/2015/L.9/Rev.1. Conference of the Parties 21st Session. Paris. [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf)
- UNGA [United Nations General Assembly]. (2015, September 25). *Transforming our world: The 2030 Agenda for Sustainable Development*. A/RES/70/1.
- UN Global Crisis Response Group on Food, Energy and Finance. (2022, August 3). Global impact of war in Ukraine: Energy crisis. *UN News*. [https://news.un.org/pages/wp-content/uploads/2022/08/GCRG\\_3rd-Brief\\_Aug3\\_2022\\_FINAL.pdf](https://news.un.org/pages/wp-content/uploads/2022/08/GCRG_3rd-Brief_Aug3_2022_FINAL.pdf)
- Vyshnytska, A. (2022, June 7). Russian fossil fuels embargo: “Dictatorships fall when there is enough pressure.” Heinrich-Böll-Stiftung. <https://eu.boell.org/en/2022/06/07/russian-fossil-fuels-embargo>

