Facilitating energy flows, containing humans

Authoritarian energy transitions in the Middle East and North Africa (MENA) region

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Contemporary relations between the European Union (EU) and the Middle East and North Africa (MENA) region represent an uneasy coexistence of facilitating flows of energy to Europe while also containing the flow of humans. The impressive size of shiny futuristic-looking solar fields portrayed in the brochures for the latest EU-MENA mega-energy projects obscures how they are part and parcel of the same project of deepening existing inequalities and furthering specific connectivities through authoritarian practices.

Attempts to achieve an energy transition present a rare opportunity to establish a more democratic, inclusive and sovereign (energy) politics, with renewable energy projects portrayed as being about open flows and connections. Yet the reality both in the MENA region and beyond is characterised by an authoritarian configuration. Efforts to transform the distributed character of renewable energies (unlike coal or oil, the sun shines and the wind blows everywhere, albeit with different intensities) into megaprojects that further consolidate power, and efforts to facilitate selective connectivities between Europe and the MENA region dominate the landscape. Similarly, although the flow of energy and high-skilled labour is strongly encouraged, other forms of South-North migration are firmly repressed.

This essay looks at what these authoritarian practices look like in practice, and how different actors from both within and beyond the MENA region are entangled in them.

Our focus on authoritarian practices rather than authoritarian regimes allows us to overcome the tiresome division of countries into democracies vs. autocracies. This division is unfortunately still far too commonly used, and conceals more than it explains, as actors based in formally democratic settings, including western private companies and multilateral development banks (MDBs), are often the key drivers behind authoritarian practices that directly reinforce socioeconomic inequalities. Authoritarian power, as we understand it, is not exclusively wielded by authoritarian regimes, nor is it only about overtly violent repression. Rather, we argue that seemingly non-violent technocratic practices also play a central role in its entrenchment.¹⁸⁰ Besides violent coercion, authoritarian practices also include strategies that pre-empt possible dissent and public participation, along with technocratic strategies that depoliticise authoritarian power in the name of 'development' or 'energy transition'.

While the gradual establishment of a Euro-Mediterranean supergrid¹⁸¹ and the construction of an increasing number of renewable energy megaprojects that connect to it will facilitate a transition away from fossil fuels, they also represent a form of highly concentrated energy politics that leaves little opportunity for broader public participation. As long as renewables remain embedded in processes of capital accumulation, the replacement of energy sources is bound to reproduce the same inequities enabled by carbon regimes. In addition, the privatisation of electricity infrastructure and production plants facilitates the global management of energy and boosts the role of transnational corporations (TNCs) rather than that of local populations.

Focusing mainly on developments in Morocco, Tunisia and Jordan, this essay reveals the authoritarian and transnationally connected nature of energy transition projects in the MENA region.

Concentrating power in the hands of a few

Private companies and multilateral development agencies frequently describe the energy transition as a purely technical process that requires highly specialised expertise in its planning and implementation. The fact that these interventions often lead to unintended socio-economic consequences is mostly ignored. We argue that technocratic practices play a central role in sustaining authoritarian power, as they depoliticise it in the name of 'development', and render violent practices of containment and coercion less visible. In addition, transregionally connected elites, transnational corporations (TNCs), multilateral development banks (MDBs) and international consulting firms directly benefit from and assist in the exclusion of public participation also beyond the field of energy politics.¹⁸²

In Tunisia, renewables currently account for only 3% of total energy production. To enhance the shift towards renewables and to strengthen the state's energy security, the country's energy sector has increasingly been opened up to private investment, and framed as a technocratic and apolitical endeavour that would not require democratic and broader public decision-making. International companies invited to invest in Tunisia promote energy futures that principally revolve around new opportunities for capital accumulation, thereby excluding alternative visions and local ownership of energy production and distribution.

Neoliberal logics were introduced in the Tunisian energy market via the country's debt crisis and reinforced privatisations that have been largely pushed by international financial institutions (IFIs) such as the World Bank. In particular, Law number 2015-12, adopted in 2015, specifies the legal framework for opening the Tunisian electricity market to (international) private investment and electricity exports to counterbalance the public energy company STEG's large public debt. Law number 2019-47, implemented in 2019, introduced power purchase agreements (PPAs) with private companies.

The Tunisian National Agency for Energy Management (ANME) regularly launches calls for tender that attract mainly international investors. For the period from 2023 to 2025, renewable energy projects with a capacity of about 1.7 gigawatts (GW) are planned through private-sector investments. As a result, most renewable energy projects in Tunisia are now owned and largely implemented through transnational European companies, such as Engie SA (France), ABO Wind (Germany), or Scatec ASA (Norway). Most of these companies also invest in renewable energies in other countries in the MENA region such as Morocco or Egypt. The increasing dominance of TNCs impedes initiatives that aim to develop decentralised and community-owned renewable energy projects – such as the Working Group for Energy Democracy – Tunisia¹⁸³ – as these are guided by the principle of sufficiency rather than profit, and are therefore not attractive to foreign investment.

New transregional connections in lieu of local ownership

Several attempts to link Tunisia's electricity grid with European countries are currently in development, which will further concentrate the power in the hands of a few powerful elite players. Two projects in particular reveal how transregional elite entanglements underpin these planned megaprojects.

In the first case, the European Bank for Reconstruction and Development (EBRD), the Italian electricity transmission operator TERNA, and the Tunisian public energy company STEG have announced plans to establish the Elmed interconnector between El Haouaria in Tunisia and Partanna in Sicily. The European Commission has defined this 200km electricity transmission line as a 'project of common interest' (PCI), lending it greater attention, political weight and funding possibilities. Feasibility studies have been funded by a large consortium including the World Bank and the European Investment Bank (EIB). This highlights the project's financial significance for these actors and hints at the opportunities for capital accumulation for private companies.

As an additional project for energy interconnectivity, the private-sector-funded project TuNur seeks to establish concentrated solar power technologies (CSP) in the south of Tunisia, using mirrors to concentrate sunlight towards a focal point where turbines produce steam through which electricity is generated. According to one company's video, the ambition is that 'Tunisian sun will light European homes'¹⁸⁴ – alluding to the project's export-oriented character. Indeed, TuNur will not even be connected to the country's electricity grid, but use interconnectors between Tunisia's northern coast and central Italy to establish a one-way flow of electricity to Europe. The company's structure is opaque, as a joint venture between companies based in Malta (Zammit Group), the United Kingdom (Nur Energy), and Tunisia.¹⁸⁵

The Tunisian authorities have recently updated their own national energy targets to increase the share of renewable energies in the national energy mix from around 3% today to 35% by 2030. Given their export-oriented nature, projects such as TuNur undermine these plans. It is not only European economies that will benefit from the Green¹⁸⁶ electricity produced, but also the (mainly) European banks and companies that reap the profits from constructing and running such megaprojects.

The dynamics in Morocco are very similar. In the second example, the Xlinks Morocco-UK Power Project – if it is ever implemented – will transport 10.5 GW of renewable energy from Morocco to the UK through a 3,800 km undersea power cable, eventually supplying 7.5% of the UK's electricity consumption. The planned solar and wind farms, which will require 1,700 km² of land (more than the entire area of London), would meet only the electricity needs of residents in the UK. It is questionable how far the Moroccan population would ever benefit from this project. The alleged creation of 10,000 new jobs¹⁸⁷ has in previous projects proven to be nothing but a pipe dream.¹⁸⁸

Portraying the TuNur and XLinks projects as 'capturing and connecting the power of nature'¹⁸⁹ and 'opening new green energy corridors between Africa and Europe'¹⁹⁰ obscures the fact that the benefits from the purported 'connection' or 'corridor' go in only one direction. This is evident in the neo-colonial conception of the desert as an empty land, which is being made valuable by becoming an Eldorado of renewable energy¹⁹¹ for Europe.

The idea of the Saharan desert as a central hub for electricity production has been circulating for some time. According to the former Desertec initiative's 2005 estimate, it would be necessary to equip a surface of 130,000 square kilometres in the Sahara with solar collectors¹⁹² to produce enough energy to meet global demand. While the Desertec project itself failed, TuNur and XLinks can be seen as its successors – albeit under new names.

Trade unions such as Tunisia's General Federation for Electricity and Gas (FGEG) and initiatives like the Tunisian Platform for Alternatives are advocating for a different approach based on local ownership, but their position is undermined by TNCs' opaque and seemingly technocratic projects. This directly affects decision-making processes, in which the views of citizens and social movements are largely excluded. Civil society organisations (CSOs) have denounced their exclusion from the development of Tunisia's Green hydrogen strategy,¹⁹³ which is currently drafted by the Ministry of Industry, Mines and Energy, and, according to some estimates, foresees exports of up to 5.5 million tons of Green hydrogen to Europe by 2050.¹⁹⁴ Given the large-scale infrastructure needed to produce and transport Green hydrogen and in view of the outcomes of previous megaprojects in the region, there is a strong likelihood of further infrastructural harm to local populations as well as land conflicts.

Connecting energy grids, containing humans

While renewable energy is expected to flow beneath the Mediterranean, migration between the southern and northern coastlines is increasingly restricted. Indeed, Europe's increasingly violent containment of migrants cannot be separated from the expansion of green energy and the envisaged exports to Europe. The EU–Tunisia migration deal signed in July 2023, for example, openly promotes the Elmed interconnector and growing energy interconnectivity as strengthening both Europe's and Tunisia's 'energy security'.¹⁹⁵ The cooperation between European countries and Tunisian authorities on migration is likely to further boost authoritarian structures in the Tunisian state.¹⁹⁶

The intersection between energy connectivity and human containment is also illustrated by Italy's positioning. The country's current far-right government is at the forefront of supporting the Tunisian government in preventing migrants from crossing the Mediterranean to reach an EU member state. At the same time, Italy aims to become a 'European energy hub',¹⁹⁷ for instance via strong energy ties with Tunisia. The envisaged energy exchanges between Tunisia and Italy also see the increasing convergence of the ethno-nationalist and populist rhetoric of President Saied, aimed mainly at migrants from sub-Saharan countries, and Giorgia Meloni's neo-fascist politics.

While (visions of) transregional energy flows enable new forms of capital investment and accumulation, human migration is violently repressed. At a geopolitical and geo-economic level, Tunisia's potential turn from being a gas importer to a Green energy exporter could reinforce transregional elite alliances that perpetuate the exclusion of Tunisian (and Italian) citizens and social movements from decision-making. The envisaged connectivity between Tunisia and Europe therefore privileges the economic interests of privatisation and capital flows over migration and demonstrates the links between subaltern movements of both continents.

Concentrating power through privatisation and indebtedness

Current efforts to achieve the energy transition in the MENA region are supported mainly by international donors and development banks. The \$9 billion Moroccan Solar Plan (MSP), for example, is mainly financed by MDBs such as the World Bank, the African Development Bank, the European Investment Bank (EIB), the French Development Agency (AFD) and the German Development Bank KfW. Unsurprisingly, foreign investment in the MSP is in the form of loans. Constant loans feed into Morocco's long-standing debt crisis, which has been used to present neoliberal policies as the logical necessity to counterbalance debt. These policies, which are supposed to lower the debt-to-GDP ratio and to achieve macroeconomic stability¹⁹⁸ include fiscal austerity, privatisation, elimination of subsidies and the liberalisation of the financial market. However, rather than opening these policies up for debate, presenting them as technical and necessary solutions to the ongoing debt crisis often bypasses political participation and thus reinforces authoritarian practices.

Following the 2008 Green Morocco Plan, which has pushed the country's agricultural sector towards the expansion of export-oriented crops and private investment, and the National Initiative for Human Development launched in 2005, which has been criticised for deepening the privatisation of public services, the MSP is only the latest national plan that depends on financing via foreign loans.¹⁹⁹ As a direct consequence, Morocco has recently spent over 10% of its revenues on debt servicing and has even embedded fiscal austerity as a guiding principle in its constitution, leading to reduced government spending on wages and subsidies. This shows that these programmes, despite their aim of boosting economic and 'human' development, as well as expanding Green energy, are inherently linked to the deterioration of social welfare.

This debt-financing has also laid the ground to accumulate further debts since the implementation of the MSP is built on public–private partnerships (PPPs). The Nour solar complex in Ouarzazate was, for instance, planned by the Moroccan Agency for Solar Energy (MASEN), a private company that has operated since its launch in 2016 with an annual deficit of around 80€ million,²⁰⁰ which is covered by public money. MASEN's mission of 'endless power for progress'²⁰¹ thus clearly describes only a certain type of 'progress', namely the ongoing intensification of capital accumulation behind a façade of 'clean' energy production and sustainability. This is also the case in Tunisia, where international financial institutions (IFIs) such as the International Monetary Fund (IMF) have put increasing pressure on the Tunisian government to reduce energy subsidies and to further privatise STEG because of its high level of debt.²⁰² While the citizens of Morocco and Tunisia bear the brunt of the costs, a few TNCs reap the profits.

The debt-financing of climate-mitigation strategies in the global South reveals that highly industrialised countries still fail to fully acknowledge their role in causing the climate crisis. Rather than paying for the consequences that the carbon-producing industries in the global North have caused to the entire planet and supporting countries in the global South to mitigate and adapt, the current donor system merely deepens pre-existing dependencies, while outsourcing many of the solutions to climate change to the global South.

Although different from a debt-financing scheme, the latest climax of this dynamic has been reached when it was leaked that – in a crass amplification of the neo-colonial dynamics at play in Xlinks or TuNur – Liberia plans to concede 10 percent of its territory to a private Emirati company in form of a carbon offset deal.²⁰³ The acquired pollution rights would enable the United Arab Emirates (UAE) to further delay its domestic energy transition. This highly dubious deal, framed under the guise of 'protecting' the Liberian forest, shows not only how supposedly 'sustainable development' projects and the impacts of carbon markets and more generally market mechanisms in the current energy transition framework are used to justify land-grabbing, but also how an international network of authoritarian elites is forming.

Techno-Optimism as climate solution?

The choice of technology reveals further the uneven power relations and top-down decisionmaking processes in much of MENA's energy transition. Morocco's renewable energy flagship project, the Nour solar complex in Ouarzazate, mainly relies on Concentrated Solar Power (CSP). While CSP promises greater electricity production than solar panels when they are installed in areas with intense direct sunlight, such as the desert, CSP plants require large amounts of water both for cooling the turbines and for cleaning the mirrors. The dependence of CSP technology on water supplies poses severe threats to the local population living in these arid desert areas, where water scarcity is already a major challenge. Oumaima Jmad, a young feminist researcher, shows how women are disproportionately affected by the paucity of water.²⁰⁴ Rabha, a woman living close to the solar complex, complains that the power plant never lacks water to convert to steam and then to electricity. Nor is there ever a shortage of water to make the power plant's mirrors and the employees' offices shine with cleanliness. But we do lack water.²⁰⁵

The fact that the solar complex in Ouarzazate requires huge amounts of water and is built on previously communal land, which was expropriated, is not mentioned on the KfW German Development Bank website, which explains in very positive terms the technical innovation of the solar complex. In a familiar pattern, the local population has been excluded from both decision-making processes in building the solar complex and the profits it will generate.

Similarly, the visit to Morocco by Germany's Minister of the Interior Nancy Faeser in October 2023 shows how intensified energy cooperation also consolidates migration 'cooperation': apart from facilitating the migration of high-skilled Moroccans to Germany, the discussion on this cooperation centres mainly around areas of security, combating organised crime, human trafficking, and terrorism,²⁰⁶ which translates into containing people in Morocco, while (renewable) energy flows.

Furthermore, the choice of technology and its provision illustrate global trade dependencies, as European companies are providing most of the construction material for the Ouarzazate solar megaproject. While the German KfW states that 'German companies that were successful in the international competition are helping to realise the country's objectives',²⁰⁷ it is the patent system that enabled German companies to generate significant profits from the construction of the Ouarzazate solar complex. Since the German companies Siemens and Schott Solar own the main intellectual property for the glass tube receivers²⁰⁸ Siemens provided those as well as the turbines, and the German company Flabeg the 2 million mirrors for the 3,000-hectare solar field. Hence, most of the value chain behind the production of solar panels is outside Morocco and the profits accordingly flow to these external actors rather than to local companies or the Moroccan public.

Concentrating power through Power Purchase Agreements (PPAs) and the Energy Charter Treaty

Still a carbonised affair: Israeli gas and normalization

Although Jordan is hailed as 'one of the leading countries in the Middle East and North Africa (MENA) region in renewable energy (RE) adoption and clean energy growth',²⁰⁹ most of its grid is still a carbonised affair. Solar and wind energy only account for 20% of Jordan's capacity, with a target to reach 31% by 2030. 80% of its total electricity production still relies on fossil fuels, which makes the process of decarbonising the Jordanian energy sector somewhat far-fetched. Nevertheless, Jordan's efforts to achieve energy transition have encouraged EU countries such as France, Germany, Portugal and Spain to draft various agreements with the country. These initiatives have struggled to lift off because of the IFIs' lack of interest.

The Jordan National Energy 2020-2030 Strategy²¹⁰ focuses on promoting 'energy security' by improving energy efficiency, energy diversification, and increasing the share of renewable energy in the whole energy mix, in order to reduce carbon emissions, and drive down energy costs. But as many energy experts have noted,²¹¹ 'exceeding this percentage [20% of renewable energy] will be challenging for Jordan unless storage solutions are implemented'.

Another challenge to the expansion of renewable energy in Jordan is its gas deal with Israel. Many have cited why the deal is a clear 'violation of Jordan's constitution', and is incompatible 'with climate concerns and Jordanian sovereignty', while 'providing funding for Israel's abuses of Palestinian human rights'.²¹² Others have mentioned the consortium of US-based Noble Energy (part of Chevron) and the Delek Group (a conglomerate of Israeli gas and oil companies) that received the main drilling contracts, but there has been less focus on the effects of newly forged PPPs on energy deals and on how efforts to achieve the renewable energy transition are characterised by contractual arrangements like PPAs that mimic its hydrocarbon predecessor.

The Power Purchase Agreement (PPA) model

Located east of Amman, Baynouna is the largest²¹³ single solar energy project in Jordan. It began operating commercially in 2020 and supplies the annual power needs of approximately 160,000 homes. Developed as a PPA between Masdar and National Electric Power Company (NEPCO), Jordan's state electricity company, this \$260 million project generates 563.3 gigawatt-hours (GWh) of electricity each year, equivalent to 4% of Jordan's annual energy consumption. The 200 MW solar power plant and Masdar's 117 MW Tafila wind farm are the bedrock of Jordan's renewable energy megaprojects.

What is a Power Purchase Agreement (PPA)?²¹⁴ A PPA or electricity power agreement is a long-term binding contract between an electricity generator (the UAE-based Masdar in this case) and a client, usually a utility, government or company (the Jordanian state, in the form of NEPCO). PPAs usually last anywhere between five and 20 years, during which time the purchaser buys energy at a pre-negotiated price. Financial institutions backing the Baynouna project include the International Finance Corporation, the OPEC Fund for International Development, the KfW, and the Japan International Cooperation Agency (JICA).

PPAs are no exception in efforts to move towards renewable energy and are increasingly becoming the norm.²¹⁵ PPAs allow for the company that builds and operates a power station to effectively shift all financial risks associated with the electricity produced to the utility. PPAs are the template for PPPs and thus play a key role in the privatisation of energy. While they offer certainty against price fluctuations, they also lock countries into fossil fuels, prevent a rapid transition to renewables and transfer payment risk from the off-taker to the state (in this case from state-owned, but privately operated, Emirati Masdar to Jordan's NEPCO).

The ever-expanding Energy Charter Treaty

PPAs have already proven to be a nuisance for the public sector and, together with the Energy Charter Treaty, the private sector is using them to extract more from taxpayers in the Global South. In 2014, AI Jazeera released the documentary 'Egypt's lost power'²¹⁶ that revealed how an Egyptian–Israeli gas deal enabled Egypt (then under Mubarak) to export its gas to Israel at below-market prices through the East Mediterranean Gas Company (EMG), which eventually pocketed huge profits. Increased insecurity regarding pipeline safety due to a growing number of attacks eventually led to the cessation of supply, with an international arbitration committee ordering²¹⁷ the Egyptian national gas company to pay the Israeli Electric Corporation more than \$1.76bn in damages, as EMG also sought compensation from the Egyptian government. This is one of many ensuing cases and was further institutionalised by the Energy Charter Treaty (ECT).

The Transnational Institute's The Energy Charter Treaty's Dirty Secrets²¹⁸ shows that 'in recent years the number of ECT investor lawsuits has exploded'. 'While just 19 cases were registered during the first 10 years of the agreement (1998-2008), 75 investor lawsuits were filed in the 2013-2017' period. As Jordan becomes²¹⁹ the acting Chair of the Energy Charter Conference for 2023 and 2024, and following the case of Egypt's 'lost power' example, it is only a matter of time before Jordan's taxpayers will face costs from its renewable energy transition PPA agreement with Masdar.

As financial risks and defaults are gradually but surely displaced onto taxpayers and the wider population, authoritarian practices, similar to those²²⁰ used to quash the anti-normalisation protests in 2016, are bound to become commonplace. These will be mediated by more rigid private–public agreements and their international financial backers, who will be determined to recoup their initial investments with interest. Just as efforts to achieve energy transition in Tunisia or Morocco enable the flows of energy and high-skilled labour, while repressing irregular South–North migration, energy politics in Jordan is diametrically opposed to popular demands and marked by growing authoritarian reinforcement.

Where and how to resist?

Contemporary authoritarian practices – both in general and in the context of the energy transition in the MENA – are characterised by transnational linkages and technocratic definitions. In order to successfully democratise the energy transition and collectively build socio-economic and environmental justice, acts of resistance must respond to this transnational and technocratic reality of contemporary authoritarian power. It would be presumptuous to draw up a generic

manual on how to resist authoritarian energy politics in and beyond the MENA region. What is possible, however, is to draw on the multiple experiences of existing transnational solidarity movements, to highlight some of the principles that inform their resistance, and to identify the various connections between their struggles. The fights against TNCs' pervasive tax evasion, against fossil fuels, for debt cancellation and climate reparations for countries in the global South, and against the privatisation of public goods, are mutually reinforcing. In order to resist the authoritarian nature of ongoing efforts at energy transition more effectively, it is essential to help better connect these struggles.

A key event in this context was the global counter-summit²²¹ of social movements, which took place in October 2023 in Marrakech, coinciding with the annual IMF and World Bank meetings. During the summit, over 300 activists from around the world gathered for four days and set out a list of demands²²² highlighting the interconnectivity of the struggles described in this essay and of topics such as debt, climate justice and migration, and the urgency to tackle them collectively. Finally, in the context of the Israeli onslaught on Gaza, of widespread protests against the normalisation of Arab–Israeli relations, and the COP28 climate summit in Dubai – where the space for resistance was heavily constrained – the power of bottom-up mobilisation and street pressure was obvious once again. In mid-November, the Jordanian regime thus effectively submitted to popular demands and announced its cancellation of the Israeli–Emirati–Jordanian water-energy deal, under which Jordan would have supplied solar energy to Israel in return for importing desalinated water.

Networks and moments of successful resistance such as these offer a glimmer of hope that the fight for energy democracy in the MENA region has not yet been lost.

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