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Introduction

Abstract

This case study investigates green industrial policy in North Africa, highlighting the tension between bold renewable energy goals and neocolonial extraction practices. The research question asks: Can North Africa's green transition meet its domestic development needs, or does it mainly replicate historical patterns of resource extraction that serve European energy security? Results show that despite substantial renewable energy efforts – Morocco aiming for 52% renewables by 2030 and Tunisia 35% – export-focused green hydrogen projects, privatisation agendas driven by international financial institutions, and the ongoing Moroccan occupation in Western Sahara through 'green' infrastructure illustrate how the energy transition risks increasing dependency rather than promoting true sovereignty. The study adds to discussions on green colonialism by illustrating how the EU's hydrogen strategy and World Bank-IMF structural reforms influence North Africa's energy trajectories, prioritising European energy security over local needs and democratic engagement.

Keywords

Industrial policy; trade; investment; just transition; state.

1 Overview

Green industrial policy in North Africa faces structural tensions between ambitious renewable energy targets and persistent patterns of neocolonial resource extraction. Drawing on case studies from Morocco, Tunisia, and Egypt, export-focused green hydrogen initiatives, privatisation agendas driven by international financial institutions, and the instrumentalisation of green infrastructure in occupied territories illustrate how energy transitions risk deepening dependency rather than promoting genuine sovereignty. Over the past decade, North African countries have emerged as continental leaders in renewable energy deployment, hosting nearly half of Africa's installed wind capacity and approximately one-fifth of grid-based solar capacity. Morocco aspires to achieve 52 per cent renewable energy by 2030, whilst Tunisia has set a target of 35 per cent, and Egypt has mobilised substantial expansion of renewable capacity.

North Africa's green transition reproduces historical asymmetries between the Global North and Global South through mechanisms of green extractivism and structural adjustment despite substantial renewable energy deployment. Progressive green industrial policy requires rejecting neocolonial frameworks, asserting resource sovereignty, democratising energy planning, and building South-South cooperation networks capable of countering Northern capital dominance. Without fundamental power restructuring, renewable energy risks becoming greenwash for ongoing exploitation. Beneath the veneer of environmental progress lies a more troubling reality: North Africa's green transition is unfolding amid significant global asymmetries that reproduce historical patterns of resource extraction serving external interests. These dynamics reveal how climate imperatives can be instrumentalised to serve neocolonial agendas, converting environmental necessity into a mechanism for reinforcing peripheral incorporation into global capitalist systems.

2 Research questions

Renewable energy transitions in North Africa, framed as climate action, merit scrutiny of their structures to serve Northern capital accumulation rather than regional development. Key questions include: How do export-focused green hydrogen projects reproduce historical patterns of resource extractivism that characterised colonial relationships? What mechanisms enable international financial institutions to leverage climate finance for privatisation agendas that subordinate energy transitions to financial sector profits? How do authoritarian governance structures exclude democratic participation and marginalised communities from energy transition planning? Can South-South cooperation networks and resource sovereignty frameworks offer viable alternatives to neocolonial dependency patterns that have historically constrained Global South development and perpetuated unequal exchange?

3 Methods

A critical political economy framework analyses green industrial policy in North Africa by synthesising government renewable energy strategies, World Bank Country Climate and Development Reports, International Monetary Fund programme documents, civil society monitoring reports from Western Sahara, and academic literature on green colonialism and energy extractivism. Neo-extractivism, structural adjustment, and democratic deficits serve as analytical dimensions for understanding how renewable energy transitions can paradoxically entrench rather than transcend dependency relations characteristic of Global South subordination to Global North capital. Southern perspectives and insights from engaged scholarship with anti-colonial social movements and policy networks across the region inform the analysis. Research explores energy transitions through the lens of political economy, examining ownership structures, capital accumulation patterns, technological dependencies, and democratic governance deficits that shape renewable energy expansion across North Africa.

4 Findings and results

North Africa's Renewable Energy Transition: Context and Asymmetries

North Africa constitutes Africa's largest energy market with relatively advanced infrastructure and universal electricity access except in Sudan and Libya. Vast renewable energy potential substantially exceeds current deployment levels. Over the past decade, North African countries have attracted significant international financing for renewable energy assets, primarily through auction-based mechanisms in Egypt and Morocco, with utility-scale wind and solar as the primary beneficiaries. Egypt and Morocco together account for more than two-thirds of Africa's installed wind and solar capacity, reflecting their position as leading renewable energy developers on the continent. Morocco's installed renewable capacity reached approximately 12 gigawatts by 2025, with around 5.4 GW actively generating from renewables. Egypt targets 25.1 GW of renewable capacity by 2030, while Tunisia aims for a comprehensive transformation of its energy sector through renewable energy. Morocco's Noor Ouarzazate Solar Complex represents the world's largest concentrated solar power plant, symbolising the region's technical and infrastructural capabilities for renewable energy deployment.

However, this expansion requires contextualisation within the context of global asymmetries. North Africa auctioned 4.8 GW of renewable capacity between 2014 and 2023, far behind Latin America's 44 GW annual average or China's 45 GW, despite possessing 22 to 26 per cent of the world's solar radiation. The gap between North Africa's renewable resource endowment and actual deployment levels reveals how

structural constraints, financing limitations, and policy frameworks oriented toward foreign rather than local benefit limit renewable energy development. The transition is driven less by autonomous North African development strategies than by external demand from wealthier economies. The European Union's hydrogen strategy explicitly positions North Africa as a supply zone, creating a structural dynamic whereby North African resources flow northward to meet European energy security objectives. Geographical reorientation of energy flows from South to North reproduces colonial-era patterns of resource extraction, updating mechanisms of accumulation to align with contemporary climate imperatives whilst maintaining fundamental relationships of subordination between resource-rich peripheries and wealthy centres of capital accumulation. Energy transitions occurring within these structural constraints reflect enduring patterns of unequal exchange and peripheral incorporation into capitalist systems organised around Northern advantage.

Export-Oriented Green Hydrogen: Reproducing Historical Extractivism

Morocco's green hydrogen ambitions exemplify how renewable energy transitions can reproduce rather than transcend extractivist patterns. In March 2025, Morocco approved green hydrogen projects worth \$32.8 billion, selecting five investor consortia for six projects across three southern regions focused on green ammonia, synthetic fuels, and green steel production targeting European markets. The ORNX consortium (United States' Ortus, Spain's Acciona, Germany's Nordex) will produce green ammonia; the UAE's Taqa, partnered with Spain's Cepsa, will produce ammonia and synthetic fuel; Morocco's Nareva will produce ammonia, synthetic fuel and green steel; Saudi Arabia's ACWA Power will produce green steel; whilst a consortium of Chinese firms (UEG and China Three Gorges) will produce ammonia. These six projects allocate up to 30,000 hectares per project, representing one of the world's largest renewable hydrogen development zones. The sheer scale of land allocation signals Morocco's strategic prioritisation of hydrogen export production over domestic energy security and reflects how renewable energy policy has become dominated by global hydrogen demand forecasts rather than North African development priorities.

Germany's ongoing partnership with Morocco includes EUR 300 million in funding for green hydrogen development and long-term technological and financial linkages with European industrial interests. TotalEnergies targets 10 GW of clean electricity capacity in Guelmim-Oued Noun commencing in 2027, positioning France as a major stakeholder in Morocco's hydrogen infrastructure and ensuring that French capital captures substantial value from hydrogen production. Europe could receive 24 GW of renewable power through North African interconnections, with the Xlinks Morocco-UK project alone supplying 11.5 GW of generation and 5 GW of battery storage. Interconnections represent permanent infrastructure investments that orient North Africa's renewable resources toward European consumption, creating locked-in dependencies through physical infrastructure, long-term power purchase agreements, and institutional relationships that favour Northern access and limit future policy flexibility.

A structural dynamic reproduces colonial patterns in which resource-rich territories produce commodities for consumption by wealthy, distant markets. Where historical colonialism extracted minerals and agricultural products, green colonialism extracts energy and hydrogen, yet the fundamental relationship in which peripheral economies generate surplus value that flows to metropolitan centres remains unchanged. Morocco's hydrogen sector will generate employment and industrial activity, yet the extraction of value through profit repatriation, technology licensing fees, and intellectual property payments ensures that wealth creation remains concentrated in foreign multinational corporations and Northern governments securing energy supplies. Foreign corporations own hydrogen production facilities and enjoy long-term offtake agreements that ensure profitable returns, whilst Morocco receives royalties and tax revenues, subject to negotiation with powerful multinational corporations. Asymmetries become apparent when examining ownership structures and the concentration of wealth extraction in foreign hands.

Large-scale hydrogen production through electrolysis requires substantial water inputs, precisely in arid regions experiencing severe scarcity. Selected green hydrogen projects will require approximately 63 million cubic metres of water annually, according to the Saharawi Observatory for Natural Resources and Environmental Protection. An enormous demand exists in regions where pastoral communities, agricultural production, and human settlements already face acute water stress. Desalination for hydrogen production exacerbates water stress, depleting fragile aquifers and increasing energy demands for water extraction. Concentrated solar power plants like Ouarzazate demand significant cooling water in semi-arid regions, competing directly with local needs for agricultural irrigation and domestic consumption. Environmental costs are socialised by imposing water scarcity on vulnerable populations, whilst profits are privatised through revenue capture by foreign corporations and Northern governments, replicating patterns of environmental injustice familiar from fossil fuel extraction, where pollution and resource depletion concentrate in Global South territories whilst benefits accrue exclusively elsewhere.

The European Union's institutional approach to North African renewable energy reveals structural contradictions inherent in the bloc's energy security strategy. Following Russia's 2022 invasion of Ukraine, the EU fundamentally reoriented its energy geopolitics, elevating North Africa from a peripheral energy concern to a strategic priority for diversifying supply chains and reducing fossil fuel dependence. However, simultaneously, this reorientation reproduces patterns of resource extraction that prioritise European energy security over North African autonomous development. The EU increasingly frames North Africa as a supply zone that meets European climate targets rather than as a region that requires energy sovereignty to serve North African populations. The proposed SouthH2 Corridor, a 3,300-kilometre hydrogen pipeline connecting Algeria and Tunisia through Italy to Austria and Germany, exemplifies this dynamic by delivering more than 40 per cent of the EU's 10 million-tonne hydrogen import target by 2030, positioning North African production capacity as essential infrastructure for European industrial decarbonisation. Expert analysis reveals fundamental misalignments between EU ambitions and North African production realities: neither Algeria nor Tunisia currently produces green hydrogen in commercially

meaningful quantities, and achieving 2030 export timelines requires technological breakthroughs characterised as 'highly ambitious' and subject to significant delays. EU Carbon Border Adjustment Mechanism, introduced in 2023 and fully operational from 2026, imposes carbon levies on imported cement, iron and steel, aluminium, fertilisers, electricity, and hydrogen, positioning emissions intensity as a competitive barrier against North African industrial exports. Although theoretically incentivising clean energy adoption, CBAM effectively creates tariff barriers against industrial products manufactured with non-EU electricity, potentially disadvantaging North African industries seeking to develop value-added manufacturing from renewable energy. A framework prioritising EU industrial competitiveness over North African industrial development replicates historical patterns in which the Global North imposes environmental standards that constrain Southern industrialisation. The Global Gateway Investment Package's EUR 150 billion allocation to Africa (2021-2027) simultaneously signals a commitment to regional infrastructure development and reveals the limited scale of institutional support relative to actual investment requirements. Whilst substantial in nominal terms, current EU allocations remain marginal relative to North Africa's development needs, forcing North African governments to accept private-sector financing on extractive terms or pursue bilateral partnerships with individual EU member states pursuing narrowly defined national interests.

Western Sahara: Green Colonialism Under Military Occupation

Green extractivism's starkest manifestation emerges in Western Sahara, where more than 80 per cent of Moroccan government land designated for renewable energy and hydrogen projects is located in occupied territory. Morocco plans to develop 553,435 hectares for Dahamco's green hydrogen and ammonia facility in Dakhla-Oued Eddahab, 150,446 hectares for Falcon, and 145,333 hectares for the ORNX consortium in Boujdour, according to the Saharawi Observatory for Natural Resources and Environmental Protection. By 2030, projections indicate that 47.20 per cent of Morocco's total wind capacity and 32.64 per cent of solar capacity will be produced in occupied territory. Bou Craa phosphate mining complex sources 100 per cent of its energy from 22 Siemens wind turbines at the 50 MW Fom el Oued wind farm, directly linking renewable infrastructure to extractive operations in occupied territory and demonstrating how green energy serves not decarbonisation but rather the expansion and consolidation of extraction in territories under illegal occupation, converting climate action into occupation infrastructure.

Installed renewable capacity generates approximately \$1.95 billion annually for Morocco, integrated into the national grid and exported internationally. Critically, the Saharawi people see no benefits from resources extracted from their territory. Instead, Moroccan authorities engineer demographic shifts by relocating settlers into energy sector employment, whilst Saharawi communities face displacement, arbitrary arrests, and systematic exclusion from economic opportunities. A contemporary form of green colonialism exists in which renewable energy infrastructure consolidates occupation by incorporating occupied territory into Morocco's national economic structures. Morocco

plans to double Western Sahara's green power capacity from 1.3 GW to 2.7 GW by 2027, with \$2.1 billion investment advancing 2030 World Cup infrastructure projects, with the acceleration of renewable energy development signalling Morocco's strategic use of green energy to entrench occupation, lock in resource dependencies favouring continued control, and create material stakes for foreign investors in maintaining the occupation status quo.

International complicity enables green colonialism extensively. Foreign corporations from France, Spain, Germany, the United States, and China reap profits whilst international financial institutions and climate frameworks provide legitimacy. France committed EUR 10 billion during President Macron's October 2024 visit to Morocco for broader infrastructure development, including renewable energy projects in both Morocco proper and occupied Western Sahara territories such as Dakhla and Guelmim-Oued Noun. The French Development Agency granted EUR 150 million for renewable energy development in occupied territory, representing tacit endorsement of renewable energy projects in a territory whose international status remains disputed under UN auspices. UAE invested \$25 billion and Saudi Arabia \$2.8 billion between 2016 and 2025, with Gulf capital seeking long-term returns from a region positioned as a future energy export hub. Multiple state and corporate actors create a coalition of interests supporting Morocco's consolidation of occupation through renewable energy infrastructure, making a divergence from this trajectory increasingly difficult. EU failure to distinguish between renewable energy sourced from occupied versus Moroccan territory, coupled with the UN Framework Convention on Climate Change's acceptance of Morocco's reporting of Western Sahara projects as national commitments, grants international legal recognition to projects that violate international law. International climate frameworks become instruments for legitimising territorial appropriation and consolidating occupation, whilst Saharawi refugees displaced to climate-vulnerable desert regions are excluded from global climate governance structures. International climate processes celebrate North African renewable energy expansion as climate progress, whilst beneficiaries include occupation authorities, multinational corporations, and wealthy nations importing energy, whilst Saharawi populations bearing primary climate impacts are excluded from benefit distribution and decision-making processes affecting their territories and futures.

Privatisation and International Financial Institutions

North Africa's green transition is substantially shaped by the International Monetary Fund and World Bank's structural adjustment frameworks, which mandate privatisation whilst constraining state capacity for autonomous energy planning. Tunisia's transition, supported by the World Bank since 2018, aims for 35 per cent renewables by 2030 and 100 per cent by 2050, with two-thirds of the programme structured through public-private partnerships. Public-private partnership models, presented as optimal for resource allocation and risk distribution, actually transfer public assets to private corporations whilst socialising risks through government guarantees and subsidies from development finance institutions. In January 2023, Tunisia launched tenders for 1,700

MW, including ten photovoltaic plants of 100 to 150 MW and eight wind farms of 75 MW. \$932 million ELMED project linking Tunisia and Italy's electrical grids received \$337 million in European Commission funding and \$268.4 million from the World Bank. Submarine cable infrastructure represents the permanent integration of Tunisian electricity systems into European markets, creating institutional lock-in that favours European access to North African renewable resources and limits future policy autonomy.

In November 2025, the World Bank approved \$430 million financing package through the Tunisia Energy Reliability, Efficiency, and Governance Improvement Program to support renewable energy deployment and utility modernisation. The programme aims to mobilise \$2.8 billion in private investment to develop 2.8 gigawatts of new solar and wind capacity by 2028, expected to generate over 30,000 jobs, primarily during construction. Emphasis on 'private investment mobilisation' reveals how development finance institutions frame renewable energy expansion as inherently requiring privatisation and absorption of foreign capital. Job creation figures emphasise temporary construction employment rather than stable operational positions, reflecting the temporary and precarious nature of benefits to local populations from energy infrastructure development controlled by external actors.

Egypt's 2014 energy sector reforms, supported by a \$3.15 billion World Bank development policy loan, transformed the sector through feed-in tariff policies, competitive bidding frameworks, and fuel subsidy phase-outs. Reforms mobilised \$2 billion in private investment in Benban Solar Park, organised through an International Finance Corporation consortium with \$210 million Multilateral Investment Guarantee Agency political risk insurance. Political risk insurance represents an explicit guarantee that foreign investors will be protected against sovereign risk, effectively placing Egyptian public resources behind foreign capital accumulation and limiting government policy flexibility. Egypt's 2024 Green Hydrogen Incentives Law and National Council for Green Hydrogen explicitly target removing barriers to private investment, whilst the World Bank Country Climate and Development Report calls for increased private-sector participation.

Egypt continues to advance its renewable capacity within privatised frameworks significantly. As of 2025, 32 Power Purchase Agreements have been signed with private developers to generate 1,465 megawatts of renewable energy, with additional agreements underway. Egypt's Ministry of Planning allocated EGP 136.3 billion to electricity and renewable energy in 2025-2026, nearly doubling the previous year's investment and targeting renewables to account for 20 per cent of power generation by 2026, up from 12 per cent in 2024. Substantial investment occurs within frameworks in which foreign corporations capture value chains and profit streams whilst Egyptian populations bear financial burdens through electricity price increases and subsidy reductions. Egypt's first utility-scale battery energy storage system, a 300 MWh facility, commenced operations in July 2025, fully integrated with AMEA Power's 500 MW solar PV plant. Battery storage technology, essential for grid stability with high renewable penetration, remains controlled by foreign corporations, creating permanent technology dependencies and perpetual rent extraction.

Tunisia's energy sector restructuring, mandated by International Monetary Fund Resilience and Sustainability Trust reforms, requires unbundling the state electricity company STEG to enable European investor entry. Although framed as technical efficiency improvements based on neoliberal economics, reforms fundamentally reshape property relations, extracting public assets and converting them into vehicles for private accumulation. Unbundling creates sacrifice zones in which certain regions receive minimal investment, whilst foreign corporations capture value chains and extract monopoly rents. Privatisation patterns demonstrate what the Arab Reform Initiative terms 'green structural adjustment,' in which loans and investments favour foreign markets over local needs, potentially turning North Africa into a renewable energy exporter whilst domestic energy security remains fragile. Citizens in privatised energy systems typically face rising electricity costs, reduced access for low-income households, and minimal influence over investment priorities or infrastructure placement. Winners of the green transition include European energy importers securing hydrogen and renewable power supplies, multinational corporations capturing value chains and monopolising technology, the Moroccan monarchy through Nareva's wind portfolio, international financial institutions expanding lending portfolios and influence, and Gulf capital seeking long-term returns on green infrastructure. Losers include local and pastoral communities displaced without compensation, precarious workers in export-focused sectors, Saharawi people denied access to territorial resources, North African citizens paying for privatisation through higher energy costs, and civil society organisations facing limited participation in energy planning.

Green Transitions under Authoritarian Governments

North Africa's green transitions proceed within authoritarian governance contexts, excluding democratic participation and systematically prioritising foreign investment over public interest. Tunisia's energy sector governance reflects regional patterns in which centralised, non-transparent decision-making prioritises attracting foreign investment over local development. Energy policy decisions are made through technical committees dominated by World Bank consultants and Ministry officials, with minimal public consultation and accountability. Egypt's Benban Solar Park, despite mobilising substantial international investment, continues facing persistent challenges in ensuring equitable benefit distribution and community participation. Local populations near Benban reported inadequate consultation and minimal employment opportunities, with most project jobs going to experienced workers from elsewhere in Egypt or foreign technicians. Morocco's renewable energy expansion takes place without significant consultation or consent from the Saharawi people, with occupation authorities imposing projects unilaterally on territories whose populations lack decision-making power.

Governance deficits fundamentally undermine the potential for just transitions. Authoritarian structures exclude civil society participation, criminalise community consultation, and suppress labour organising around energy issues. Without reforming governance to serve public rather than private interests and establishing robust labour policies ensuring local employment, investments generate temporary foreign labour

rather than long-term community benefits. Renewable energy investments theoretically generate 2 to 5 times more jobs per unit than fossil fuels, yet potential fails to be realised absent enabling labour market policies, technical training programmes, and democratic decision-making structures centred on justice. Energy transitions imposed through technocratic frameworks typically benefit international capital and local elites whilst reproducing marginalisation of working-class populations and local communities dependent on land for survival. Progressive green industrial policy requires rejecting export-focused hydrogen frameworks and redirecting renewable energy toward domestic industrialisation and regional development, prioritising domestic renewable deployment over exports until local decarbonisation reaches 60 to 70 per cent. North Africa's vast renewable potential should serve North African development needs: electrifying rural areas lacking electricity access, industrialising value-added manufacturing and processing sectors, and transforming agriculture through renewable-powered irrigation and agro-processing infrastructure. Rather than meeting European energy demand through hydrogen export corridors, renewable resources should address North African development objectives and poverty reduction by rejecting export-oriented hydrogen strategies and redirecting investment toward integrated energy systems serving continental development and regional South-South cooperation, ensuring that renewable resources first address North African energy poverty and support sustainable industrial development. Domestic energy security must precede export orientation, ensuring that renewable resources first meet North African needs and support development priorities.

5 Main results

North Africa's renewable energy transition, whilst substantial in capacity deployment, reproduces rather than transcends neocolonial patterns. Export-focused hydrogen projects prioritise European capital accumulation over North African development. Privatisation frameworks are driven by international financial institutions that subordinate energy transitions to financial-sector profits. Occupation territories become sites for green infrastructure expansion, serving resource appropriation and territorial control. Authoritarian governance structures exclude democratic participation and marginalised community voices. Environmental cost socialisation is profound, as water stress and displacement burden vulnerable populations whilst benefits flow to foreign capital. Progressive alternatives rooted in resource sovereignty, energy justice, and South-South cooperation exist. Morocco's renewable energy potential, if oriented toward domestic industrialisation and regional development rather than European hydrogen supply, could support progressive green industrial policy centred on continental integration. Tunisia's renewable energy deployment could prioritise public ownership and democratic energy planning rather than World Bank-mandated privatisation. Egypt's renewable energy expansion could serve local development needs through publicly owned utilities and democratic governance. Alternatives require rejecting neocolonial frameworks and investing political will in asserting North African agency and development priorities.

6 Discussion and conclusions

North Africa's green transition illustrates how renewable energy deployment, absent fundamental power restructuring, risks reproducing rather than transcending neocolonial relations. Export-focused hydrogen strategies prioritise European security over North African development. Privatisation frameworks subordinate energy transitions to financial sector accumulation. Occupation territories become sites for green colonialism. Authoritarian governance excludes democratic participation. Environmental imperatives can be weaponised to serve geopolitical interests and capital accumulation rather than advancing genuine sustainability and justice for affected populations and ecosystems.

Alternatives exist. A progressive green industrial policy centred on sovereignty, justice, and South-South cooperation can harness North Africa's exceptional renewable energy potential to advance continental development and liberation. Climate change must be recognised as fundamentally a justice issue, with Global South nations bearing climate impacts yet bearing minimal responsibility for emissions, deserving material support to advance transformation. Local energy knowledge systems and community-based renewable energy development models offer alternatives to technocratic, export-oriented approaches dominating current policy frameworks.

Absent fundamental reorientation, renewable energy risks becoming greenwash for ongoing extraction and exploitation, where green labels obscure relationships of control and dependency between Northern corporations and Southern territories. Severe climate impacts facing North Africa, including intensified water scarcity, desertification, agricultural disruption, and displacement, require rapid energy transformation. Nevertheless, transformation must serve North African populations rather than distant European consumers or multinational capital pursuing profit maximisation.

Climate justice requires recognising Northern historical responsibilities for atmospheric carbon accumulation, ending neocolonial extraction patterns, democratising energy transitions, and empowering marginalised communities as decision-makers. Renewable energy potential, technical capability, and financial resources exist. What remains is the political will to centre justice over profit, sovereignty over dependency, and democracy over technocracy. Building such a will requires not technical solutions but political struggles by North African workers, communities, and social movements demanding that energy transitions serve liberation rather than reinforcing subordination to global capital structures. Renewable energy's destiny is to become either a tool for emancipation or a mechanism for updating exploitation to accommodate climate imperatives. Regional actors hold decision-making power regarding which trajectory North Africa pursues, requiring assertion of agency and resource sovereignty against Northern capital and international financial institutions.

7 Recommendations

A progressive green industrial policy in North Africa requires an immediate reorientation toward sovereignty, justice, and regional development. First, resource sovereignty must be asserted through technology transfer requirements, local content mandates, and compulsory licensing, thereby replacing intellectual property monopolies that limit access to technology. North African economies must develop domestic renewable manufacturing capabilities rather than remaining permanent assembly locations for imported components. State investment in public renewable companies can compete effectively with multinationals whilst maintaining democratic accountability. Local manufacturing of solar panels, wind turbines, and battery storage would create stable, skilled employment and retain more value chain benefits within national economies. Technology transfer provisions in international agreements should require multinational corporations to establish training and research facilities in host countries, thereby building national technical capabilities rather than perpetuating long-term dependence on foreign expertise.

Second, Western Sahara occupation must end, and Polisario's representational authority must be recognised internationally through UN processes. Green infrastructure cannot legitimise territorial appropriation and illegal occupation of UN-listed non-self-governing territories. International climate frameworks must distinguish between renewable energy produced in occupied versus sovereign territory and refuse to grant international recognition to projects that violate international law and UN Security Council resolutions. Climate justice demands alignment with broader justice principles regarding self-determination and territorial sovereignty, establishing a crucial precedent that environmental progress cannot override human rights protections and colonial occupation.

Third, energy planning must be democratised through mandatory community participation, labour movement involvement, and the inclusion of civil society in decision-making. Energy constitutes a fundamental public good requiring democratic governance accountable to affected populations. Transitions imposed through technocratic frameworks serving financial interests generate neither justice nor sustainability. Energy democracy frameworks should ensure that affected communities have decision-making power over energy infrastructure development, location, and ownership structures affecting their territories and futures.

Fourth, international financial institution conditionalities mandating privatisation must be rejected as development conditions. Public utilities must be strengthened through transparent governance, workforce development, and integration with broader development strategies. Public ownership permits aligning energy transitions with public benefit rather than profit maximisation. Public utilities can prioritise universal energy access and affordability over shareholder returns, making energy a right rather than a commodity.

Fifth, climate debt must be demanded as grants rather than loans, accompanied by technology transfers and the cancellation of odious debt. Global North historical responsibility for atmospheric accumulation requires material recognition through resource transfers that enable just transitions. Wealthy nations that industrialised through fossil fuels bear responsibility for financing Global South energy transitions rather than imposing loan burdens.

Sixth, South-South cooperation frameworks must be built to enhance collective bargaining power against Northern capital and international financial institutions. African, Latin American, and Asian countries with extractive dependencies require coordinated strategies that assert resource sovereignty and reject conditionalities. Regional cooperation organisations could establish common standards for renewable energy development, preventing races to the bottom in environmental and labour protections. North Africa's renewable energy potential offers genuine pathways toward liberation and development if oriented toward justice, sovereignty, and democratic control rather than serving Northern capital accumulation and maintaining neocolonial subordination.

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