AFRICA CHANGE LAB

Green Industrialisation In Senegal: From Gas-Led Growth To Regional Renewables

June 2026

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Executive Summary

Findings

Senegal stands at a pivotal moment in both its energy transition and its pathway to industrialisation. Under Vision Sénégal 2050, the development framework adopted by the government elected in 2024, the country has set out an industrial model built on its extractive resources, primarily oil and gas. With first production at the vast Sangomar field and the Greater Tortue Ahmeyim (GTA) gas project now underway, and major thermal plants being converted from heavy fuel oil to liquefied natural gas, this gas-led industrial path is already being laid. Such a trajectory risks locking the energy system into long-lived fossil assets and continuing external dependency at the moment renewable costs are falling and green industrialisation is gathering momentum across the continent.

Green industrialisation would provide a step change for Senegal. The country already has strong foundations for a different model with one of the highest electrification rates in sub-Saharan Africa (between 79 and 84 percent of households and businesses connected), a growing share of solar and wind generation, and a commitment under its Just Energy Transition Partnership to reach 40 percent renewables in installed capacity by 2030.

The case for renewables is not only environmental but industrial as lower-cost clean electricity is a competitiveness lever for Senegalese industry, and the country's strong solar and wind resources, concentrated in the north and along the Atlantic coast, position it as a potential net exporter of clean electricity into the regional and continental market. To take one example, we assess that businesses at Sandiara SEZ could electrify their industrial processes, which collectively support around 3,000 jobs. Senegal has far more renewable potential than it could ever consume domestically. One key study puts solar PV capacity alone at a conservative 1,605 GW, with a further 297 GW available from onshore and offshore wind, enough to power the entire economy and still export electricity to every neighbouring country.

Senegal could become a key green player in West Africa. As a member of the West African Power Pool (WAPP), and with regional integration now being financed through the World Bank's WA-REMP programme under the Mission 300 access initiative, Senegal can treat surplus renewable generation as an export and industrial asset rather than as domestic oversupply. The country's network of Special Economic Zones (SEZs), currently numbering six with ambitions to expand to 45, offers a natural delivery vehicle for green industrialisation, provided that renewable energy, community ownership and community benefit are embedded in design from the outset. However, the experience of the Taïba Ndiaye wind farm, the largest in West Africa but criticised for inadequate community engagement and adverse environmental impacts, is a reminder of what is at stake if equity is treated as an afterthought.

Policy Recommendations

Mandate renewable energy in all new Special Economic Zones. Senegal's ambition to develop 45 SEZs presents a unique opportunity to embed renewable energy as a standard requirement from the outset, powering emergent green industries. The government should revise the legislative framework for SEZs to require that all new zones source a minimum share of their electricity from on-site or locally-contracted renewable generation, and set a timeline for existing zones relying on natural gas, such as Sandiara, to transition away from fossil fuels.

Establish a statutory community benefit framework for renewable energy projects. The government should introduce legislation requiring developers of utility-scale solar, onshore wind and offshore wind projects to negotiate community benefit agreements with affected populations prior to receiving project approval. These agreements should guarantee minimum revenue-sharing arrangements, local employment targets, and mechanisms for community co-ownership of energy assets, drawing on emerging models from elsewhere in the region.

Prioritise renewable electrification for rural mini-grids and accelerate the LPDSE 2025–2029 targets. With 55 percent of Senegal's rural population still lacking access to grid-based electricity in 2023, the government must urgently accelerate progress towards the universal access commitments in its Energy Sector Development Policy Letter. This should include a phased programme to replace diesel-based mini-grids with solar-hybrid alternatives, alongside transparent reporting on progress against electrification targets.

Strengthen domestic tax collection to expand fiscal space for green industrial investment. Improved domestic tax collection should be pursued as a source of public finance for capital investment, reducing the dependency on external debt and take-or-pay contracts that currently impose financial risks on both Senelec and the state.

For Senegalese Civil Society

Build a coalition of Senegalese stakeholders unified around a single narrative: renewable energy for local communities. Build a database of relevant NGOs already campaigning on a region-by-region and national basis. Target and recruit NGOs with energy-related mandates, but also identify NGOs campaigning in other relevant sectors such as health, industry and social justice platforms. Build a common platform with sympathetic actors including religious institutions, community groups, tribal representatives and local government representatives.

Monitor and document the social and environmental impacts of renewable energy projects and green industry. Civil society organisations should develop systematic capacity to monitor the environmental and social impacts of renewable energy installations – including land displacement, biodiversity loss, and community benefit-sharing compliance – and to publish findings in forms accessible to both Senegalese communities and international audiences. This evidence base will be essential for holding developers and the Senegalese government to account, and for demonstrating the importance of stronger safeguard standards to international donors.

Advocate for community co-ownership models in rural electrification. Civil society should champion legal and financial models that give rural communities genuine ownership stakes in mini-grids and other local energy assets. This includes engaging with the regional concession framework to push for cooperative and municipal ownership options, and working with sympathetic donors and development finance institutions to deploy instruments, such as the existing patriotic and citizen securities, which have already raised US$1.78 billion on West African capital markets.

Engage with the SEZ planning process to embed local procurement and skills development. As Senegal moves to develop 45 Special Economic Zones, civil society organisations should engage with the planning and approval processes for individual zones to advocate for local content requirements, apprenticeship programmes, and skills development initiatives linked to renewable energy installation and maintenance. Ensuring that SEZ development generates lasting local employment, rather than relying predominantly on imported labour, will be essential to delivering a just transition.

For International Donors

Reform the terms of development finance to reduce financial dependency. Development finance institutions should review and reform the interest rates, transaction costs and take-or-pay contract structures that currently impose financial burdens on Senelec and the Senegalese state. Concessional lending for renewable energy projects should be expanded and structured to build the long-term fiscal capacity of the state rather than entrench dependency on external capital flows.

Increase grant and concessional funding for rural electrification. Rural mini-grid electrification in Senegal has been largely dependent on donor funding because the commercial case for private investment remains weak. Donors should commit to scaling up grant-based and highly concessional funding for rural renewable mini-grids, with particular attention to regions where the central grid is unlikely to reach within the decade. Funding should be structured to support community-owned and cooperative models of mini-grid governance wherever feasible.

Make JET-P disbursements conditional on community engagement and benefit sharing. The lessons of the Taïba Ndiaye Wind Farm demonstrate that flagship renewable projects can cause community harm when social safeguards are inadequate. International donors and JET-P funders should introduce binding conditionality requiring that projects above a minimum threshold demonstrate meaningful prior consultation with affected communities, publish environmental and social impact assessments, and commit to transparent benefit-sharing arrangements before funds are disbursed.

Support technical assistance for green industrial development. Donors should provide targeted technical assistance to the Senegalese government to support the planning, permitting and development of green industrial zones alongside the country's SEZs. This should include support for biodiversity assessments, land-use planning, grid connection studies, and the design of competitive and transparent procurement processes for renewable energy projects at these sites.

Introduction

One of Africa's fastest-industrialising economies, Senegal is also developing its renewable generation capabilities. Under its government elected in 2024, it has placed economic sovereignty and value-adding industrialisation at the centre of its national policy agenda. Years of public investment have delivered one of the highest electrification rates on the continent, with up to 84 percent of households and businesses now connected to the grid and an increasing share of electricity drawn from renewables, with around 7 percent from solar and 5 percent from wind in 2023. The 158.7 MW Taïba Ndiaye wind farm, the largest in West Africa, stands as a marker of how far the country has come, though, as discussed later in this report, also of the equity risks that accompany large renewable projects when communities are insufficiently consulted.

Yet these achievements sit alongside a central, unresolved, choice about the shape of Senegal's energy transition and its pathway to industrialisation. The government's Vision Sénégal 2050 framework rests its industrial ambitions substantially on the country's new oil and gas resources, using domestic fossil fuels to purportedly lower power costs and drive local processing. This approach is believed to help the country overcome its historic reliance on imported fossil fuels that have created some of the highest electricity generation costs on the continent and landed consecutive Senegalese governments with substantial subsidy bills.

But a renewable-led approach to green industrialisation is eminently possible. Not only would this help overcome the risk of fossil fuel lock-in and stranded assets, it would leverage Senegal's growing renewable generation and its position within the WAPP. Such an approach can meet the government's own industrial and developmental objectives - competitive power for industry, local value-addition, and expanded energy access - while reducing rather than entrenching dependency and ensuring that the energy transition is just and inclusive. A recent Oxfam report highlighted the role of foreign-owned independent power producers (IPPs) in Senegal, which risks privatising the gains from the renewable transition to the detriment of nationally- or community-owned energy assets.

However, reliance on fossil fuels and energy access remain key challenges. Heavy fuel oil (HFO) continues to play a substantial role in Senegal's energy generation, with 84.7 percent of electricity generated using oil in 2023. This raises challenges for national efforts to reduce CO2 levels by 29 percent by 2030 under Senegal's most recent Nationally-Determined Contribution (NDC). Energy access also remains an issue for many Senegalese. While electrification rates soared from 39 percent in 2001 to as much as 84 percent in 2023, many Senegalese still lack access to electricity. In 2023, 55 percent of Senegal's rural population lacked access to grid-based electricity. The Senegalese government has announced ambitious targets to achieve universal electricity access in its Energy Sector Development Policy Letter (LPDSE) 2025–2029. Moreover, foreign investment typically carries high interest rates, high transaction costs, take-or-pay contracts that impose additional financial obligations on the electricity company (in this case, Senelec), perpetuating financial dependency. Instead, Senegal could adopt more stringent tax collection methods to raise public finance to fund renewable energy projects and green industrialisation.

This report sets out how to deliver an alternative pathway for Senegal. The suite of national policy targets now organised under Vision 2050, and the regional electricity market emerging through the WAPP and the emerging Africa Single Electricity Market (AfSEM) could transform Senegal's potential renewable resource into an export asset, providing leverage for green industry and sustainable development. Drawing on available reports and statistical data, including spatial analysis of the country's solar and wind potential, the report identifies where green industrial development could be concentrated and what conditions would make it equitable.

Senegalese Industrialisation: Gas or Green?

Though Senegal has already developed several areas for implementing green industrial policy (see Box 1), the government is prioritising an industrial model built on fossil fuels. When elected, the administration replaced the Plan Sénégal Émergent with Vision Sénégal 2050, a twenty-five-year national transformation agenda launched in October 2024 and operationalised through a first National Development Plan for 2025–2029. This strategy is explicit that extractive industries - primarily oil, gas and phosphates - are the country's primary growth engine, and that these resources, until now largely exported in raw form, are to be used to industrialise the country through domestic energy generation and processing and refining.

The fossil fuel foundations of this strategy are already in place. Production at the offshore Sangomar oil field began in June 2024, and the Greater Tortue Ahmeyim (GTA) gas field, developed jointly with Mauritania, has moved towards first exports. This latter project is so large that, when burnt, the emissions would be equivalent to 1 percent of the remaining 1.5°C carbon budget. This fossil-fuelled approach entails long-lived assets and long-term supply commitments that can lock Senegal's energy system into fossil dependency precisely as the market for fossil exports becomes more uncertain, raising the prospect of stranded assets and of fiscal exposure transferred onto the state and the national utility, Senelec. This tension is already embedded in Senegal's JET-P, where the political declaration treats natural gas as a "transitional" fuel alongside a gradual phase-out of heavy fuel oil, rather than as something to be displaced by renewables outright.

Box 1. Green Industrial Policy

Green industrial policy includes introducing low-carbon fuels in industry and through industrial electrification, such as electrifying heat-intensive industrial processes such as steel or cement manufacture. It also encompasses the policy frameworks used to achieve these goals, such as tax incentives and varying degrees of public ownership of new assets. Green industrial policy can either be passive – reducing the cost of business by improving access to information and reducing coordination and transaction costs – or active, where the state takes a more active role in coordinating policy and stewarding investment.[1]

[1] Kozul-Wright, Richard, Kevin P. Gallagher et al. 2025. Green Developmental Statecraft: The International Dimension of Green Structural Transformation in the Global South. Boston University Global Development Policy Center.

Senegal is witnessing the first shoots of green industrialisation. These include the renewable energy solutions at Diamniadio SEZ, where the United Nations Industrial Development Organization (UNIDO) has supported companies to pilot renewable energy technologies, low-carbon technologies and integrated waste management. [1]Examples like this show that building industrial capacity on a foundation of renewable energy, local value-addition and, where possible, public or community ownership of new assets, is an achievable objective for Senegal. Indeed, green industrialisation meets the government's stated commitment to local value-addition on its own terms. Rather than exporting raw resources, the aim is to process and manufacture domestically and the installation, operation and maintenance of renewable infrastructure is itself a source of skilled local employment, provided that local-content and skills-development requirements are built into procurement.

Senegal already has a significant amount of renewable energy generation to build upon. Utility scale solar plants at Kahel and Kaone have a total capacity of 60MW, funded by a consortium of European development institutions and sponsored by Engie, Meridiam and the Senegalese Sovereign Wealth Fund. While solar generation is more concentrated in Northern Senegal, the country's industrial areas are predominantly located in central Senegal and along its coasts. To that extent, Kaolack, Kolda and Tambacounda also present potential locations for large-scale solar projects due to their large populations and proximity to industrial zones.

Delivering Green Industrialisation In Senegal

To attract foreign investment in its industrial sector, Senegal adopted legislation in 2017 aimed at establishing several Special Economic Zones (SEZs). To date, these SEZs include Diamniadio, Sandiara, Bargny-Sendou, Diass, Bélé-Kidira and Louga (Table 1). Diamniadio, located 40 kilometres from Dakar, has attracted investment from several countries, while Diass is located next to the country's international airport and Sandiara is inland to the south of Dakar. Diass is meant to provide 3,500 jobs, while Sandiara is set to generate 20,000 jobs. However, while solar power is central to the Diass SEZ, the other two are premised on fossil gas, as in the case of Sandiara's gas-to-power facility. Moreover, while Bélé-Kidira and Louga SEZs have been announced, little else is known about them. Senegal has announced plans to develop 45 SEZs across the country in an effort to attract foreign investment to the country. While no single deadline has been announced for the completion of these industrial zones, APIX, the Senegalese investment agency, projects that nine SEZs will be completed by 2030.

Table 1. Senegalese Special Economic Zones

Industrial Zone	Industrial Activity	Proposed Energy Source
Diamniadio	Assembly and packaging, food processing, manufacturing, building materials, information and	Diamniadio
Sandiara	Industry, agribusiness, aquaculture, tanning, information and communication technologies, poultry farming, energy, logistics and services	Natural gas
Diass	Industry, agribusiness, information and communication technologies, tourism, port activities, medical supplies and services	Solar
Bargny-Sendou	Production of iron billets, concrete and wire rods, steelmaking, iron and steel industry, heavy industry; port logistics (handling, warehousing, storage) and related services.	Unknown
Bélé-Kidira	Unknown	Unknown
Louga	Unknown	Unknown

Yet many of the activities outlined in Table 1 would be carbon-intensive and polluting in a "business-as-usual" scenario. APIX, the Senegalese investment promotion agency, cites gas as the primary feedstock for these economic zones.[1] Thus any emissions from 45 SEZs would increase Senegal's overall greenhouse gas emissions significantly and contribute to heightened levels of pollution in the residential areas surrounding the SEZs.

Green industrial zones, by contrast, achieve sustainable domestic industrialisation alongside utility-scale renewable energy generation. Such zones would demonstrate the economic, environmental and social benefits of renewable energy and function as a proof-of-concept for future large-scale renewable development in diverse African contexts. Examples of Special Economic Zones harnessed for green industrialisation already underway include South Africa's Atlantis Greentech SEZ, which its board expects to attract 4 billion Rand (US$ 262 million) in investment between 2026 and 2029. Elsewhere in Africa, Zambia and the DRC have developed a battery and electric vehicle zone co-located between their two borders. BloombergNEF has estimated that producing car components in this area would be cost-competitive with material produced in China and have a smaller environmental impact, thereby reducing its exposure to green levies such as the European Union's Carbon Border Adjustment Mechanism.

To identify potential locations for green industrialisation in Senegal, our research considered spatial analysis by the University of Technology Sydney's Institute for Sustainable Futures. This research examined areas of land appropriate for installing solar PV, onshore wind and offshore wind,[1] using existing land-cover, conservation areas, solar irradiation and wind speed data to generate a spatial analysis of suitable areas. The spatial analysis is shown below (Figures 2-4). Figures 2a and 2b, figures 3a and 3b, and figures 4a and 5b should be read as pairs, with the first image showing the maximum potential installation area and the second showing a more conservative version with limitations applied. Combining the data from the UTS spatial analysis with the SEZ data enabled us to determine strategic zones for locating solar and both onshore and offshore wind (Table 2).

Solar

Figure 2 shows the areas appropriate for solar installations, with Figure 3 removing areas within 10 kilometres of existing electricity transmission lines.

Figure 2a. Senegal: Areas of Solar Potential (Scenario 1: LU + PA + S30)

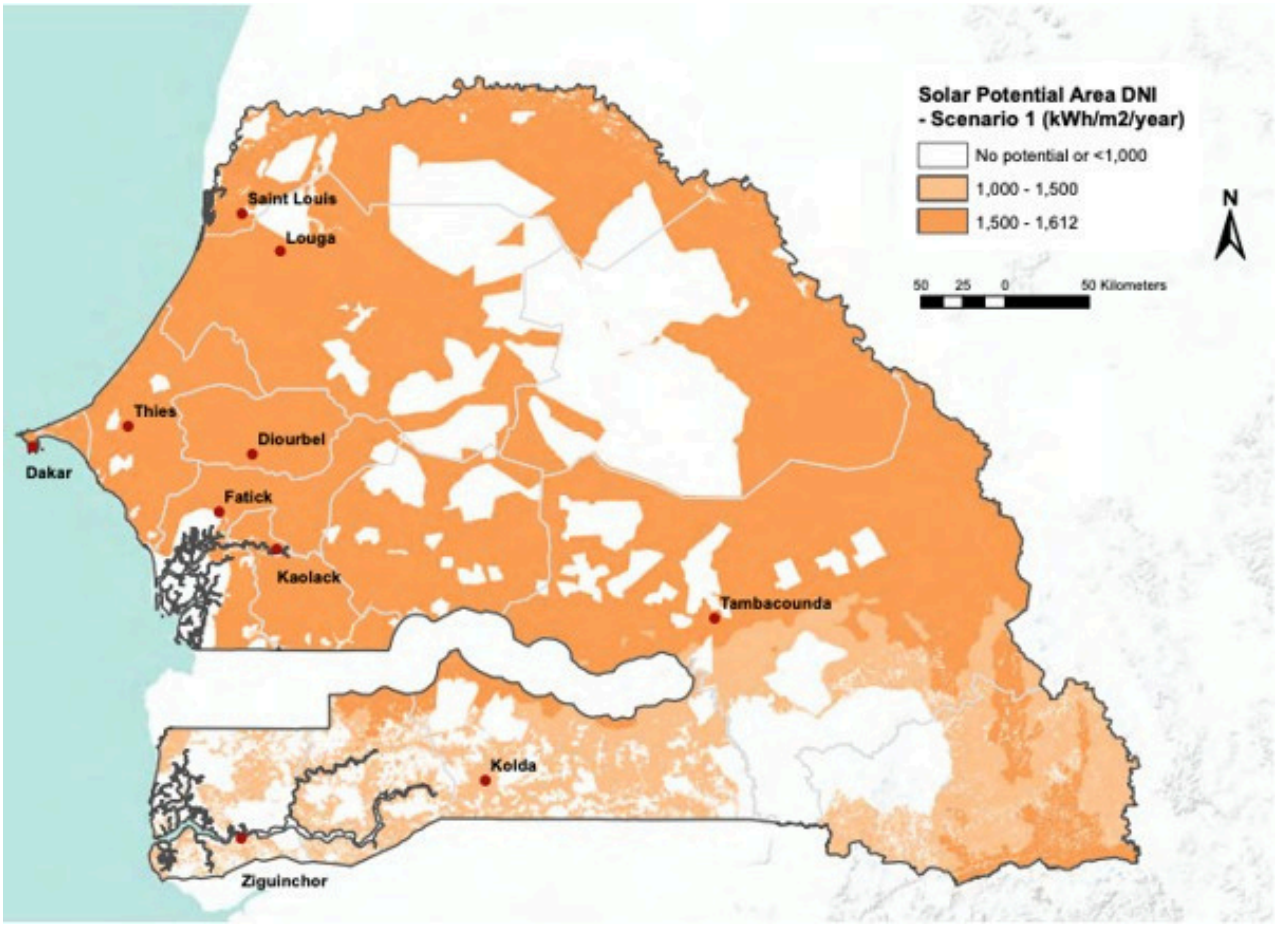
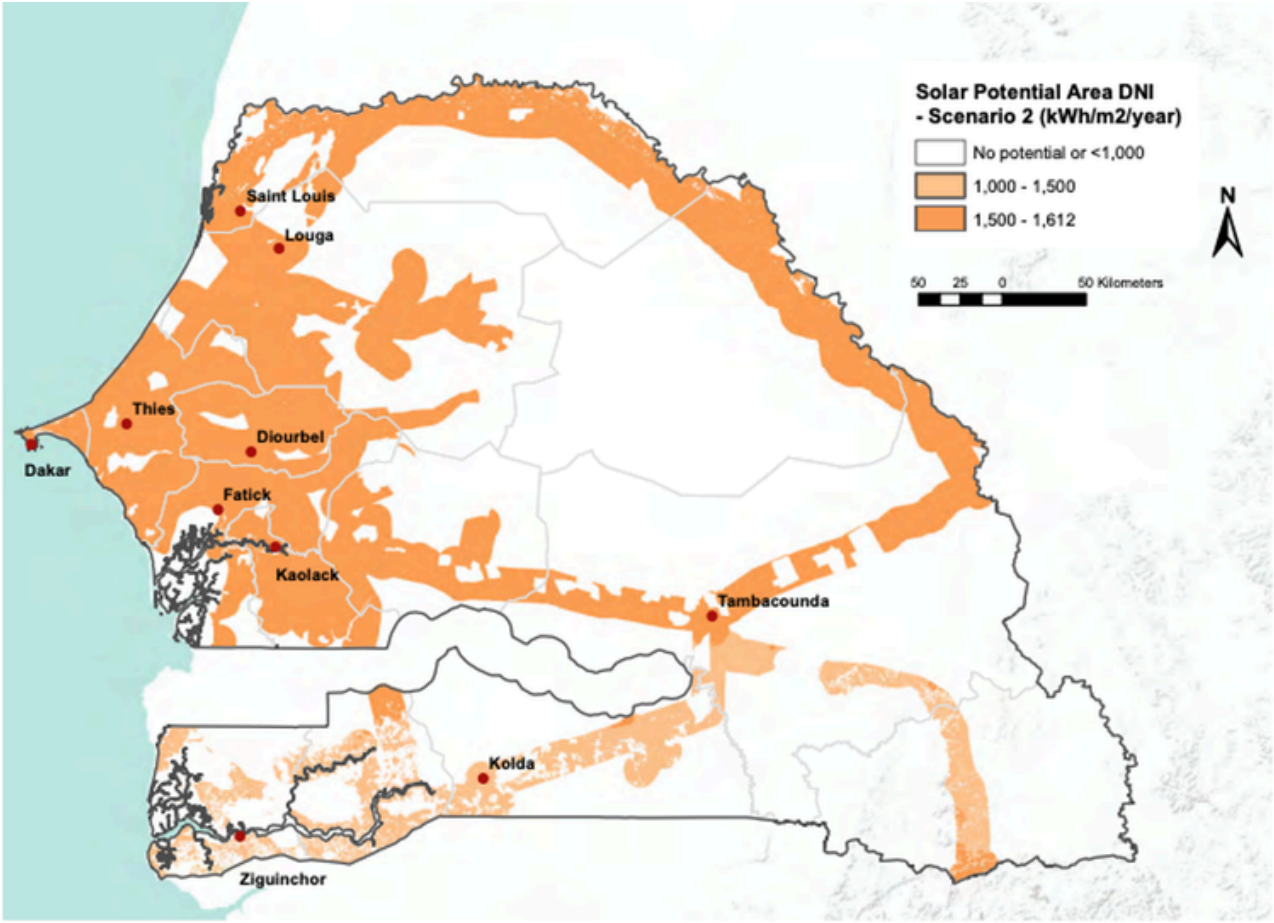


Figure 2b. Senegal: Areas of Solar Potential (Scenario 2: LU + PA + S30 + PT10)



Onshore Wind

Figure 4 shows the areas suitable for onshore wind, with Figure 5 applying the same 10-kilometre exclusion rule.

Figure 3a. Areas of Onshore wind potential

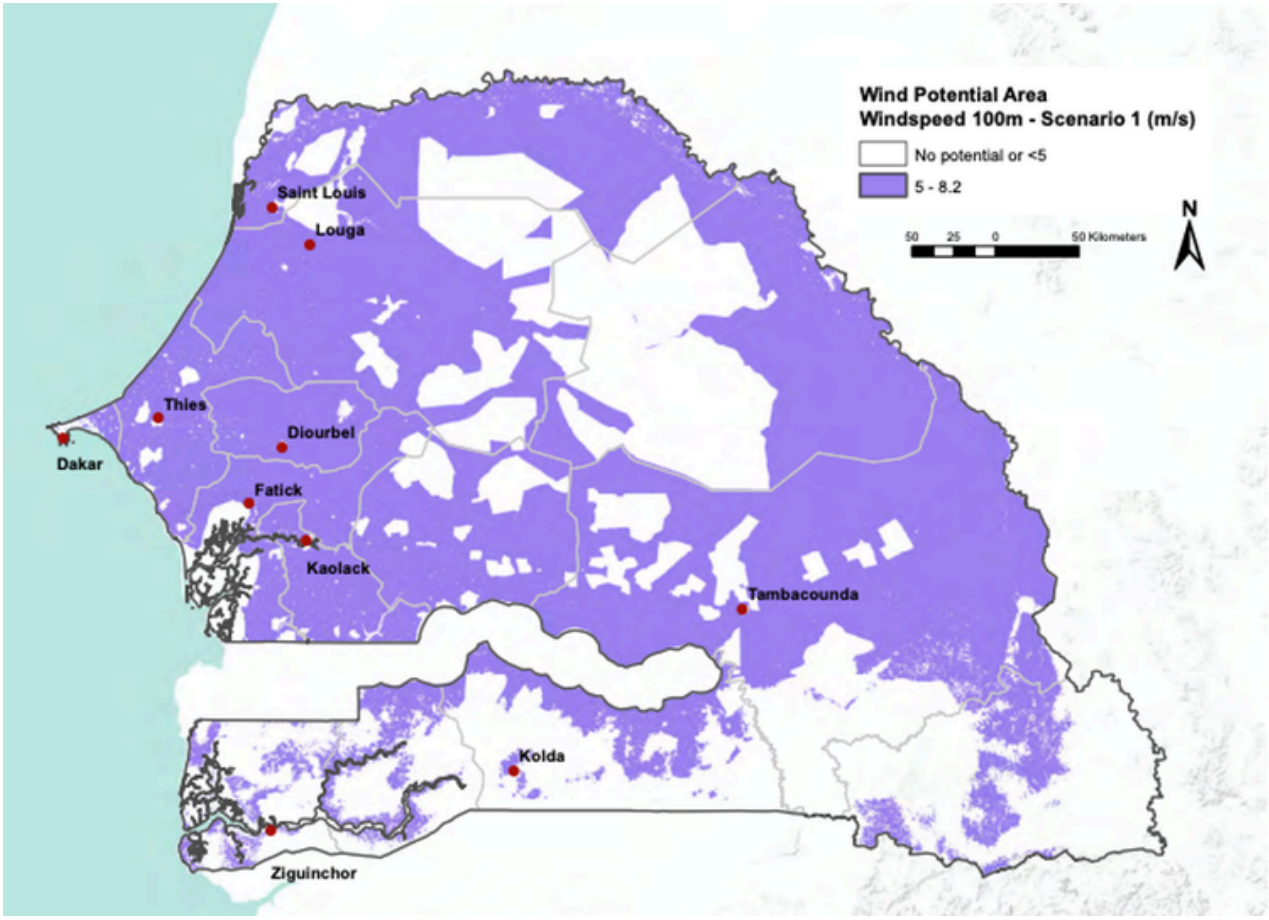
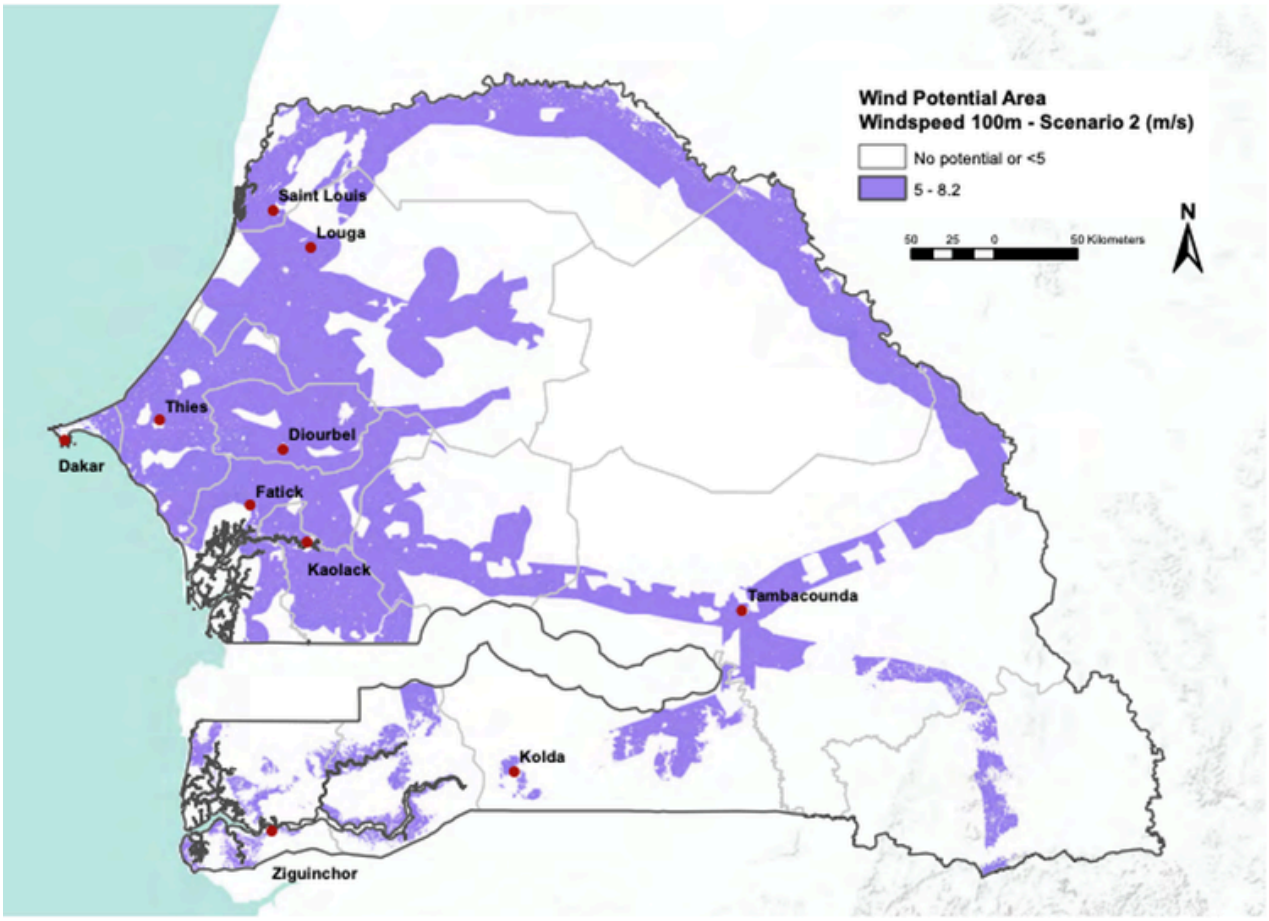


Figure 3b. Areas of Onshore Wind Potential (Scenario 2: LU + PA + S30 + PT10)



Offshore Wind

Figure 6 shows the areas for offshore wind with sea depth of 50m or more, with Figure 7 including only areas with sea depth of 500m or more.

Figure 4a. Senegal – Areas of Offshore Wind Potential (Scenario 1)

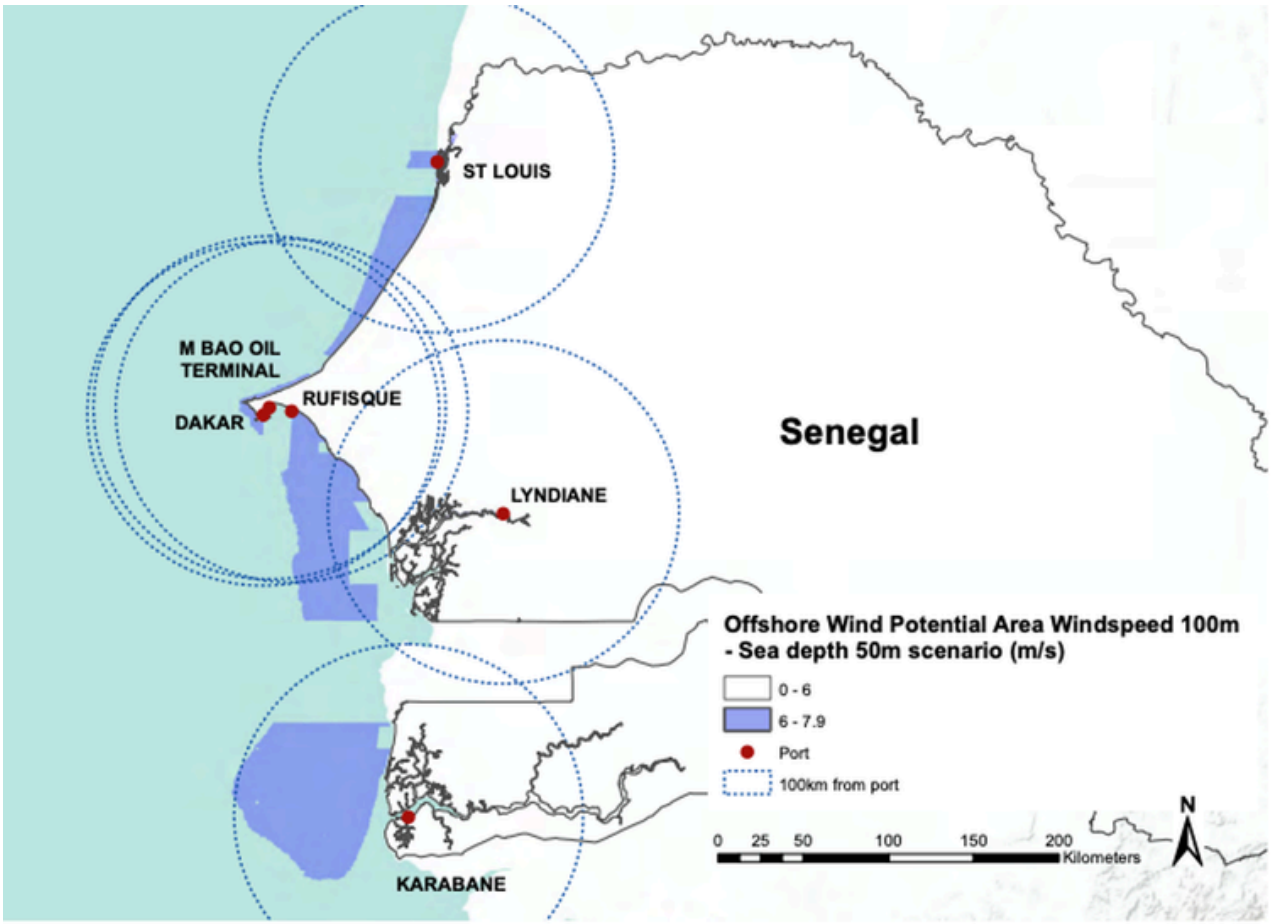
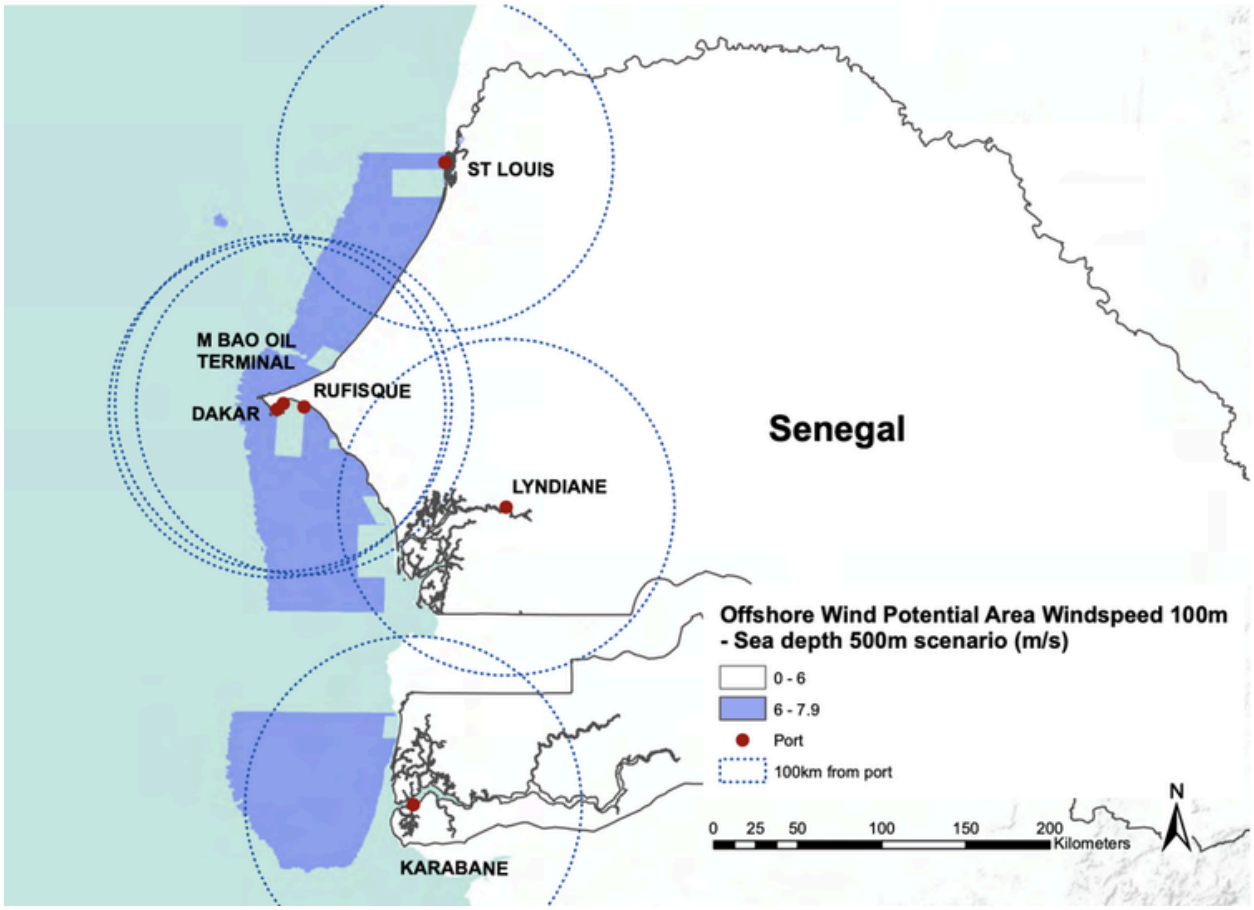


Figure 4b. Senegal – Areas of Offshore Wind Potential (Scenario 2)[44]



The UTS report found that, at a conservative estimate, Senegal could produce an extraordinary 1,605 GW of solar PV energy and 297 GW from onshore and offshore wind annually. The report also notes that the total potential exceeds Senegal's projected electricity demand by 2050, powering a fully electrified transport system, the entire industrial sector and all households, with enough surplus electricity to export to all neighbouring countries. Moreover, these figures are a conservative estimate since they factor in existing limitations such as proximity to gridlines, meaning that mini-grids could also be established over and above grid-connected generation assets.

The SEZs, which are largely located in the west of the country, benefit from high levels of insolation and average wind speed, making them suitable for adjacent wind and solar installations. Since both wind and solar potential are greater in the north of the country, the Louga SEZ makes it a particularly promising candidate for both utility-scale solar PV and onshore wind. However, it is worth noting that Senegal exhibits strong solar potential across the country, and that central and southern areas could be suitable sites for solar installations in addition to the particularly favourable conditions in the west of the country.

Table 2. Top 5 proposed Iconic Renewable Energy Zones in Senegal

Technology	Top 5 Green Industrial Zones	Justification
Solar	Diass, Sandiara, Bargny Sendou, Diamniadio, Louga	High GHI (Solar Atlas), western & northern solar hotspots, grid access, industrial demand
Offshore wind	Bargny-Sendou, Diass, St. Louis, Rufisque	Coastal proximity, best offshore wind potential
Onshore wind	Louga, Sandiara, Diamniadio	Northern strong wind corridor, good inland wind suitability

To give an illustrative example, businesses supporting around 3,000 jobs at Sandiara SEZ could electrify their industrial processes. Sandiara plays host to energy-intensive businesses, including a Chinese iron production company, as well as companies involved in fertiliser production, battery manufacture, and seafood freezing and processing (see Appendix 2 for a table of the companies located at Sandiara). Industrial processes such as cold chains (refrigeration, freezing), poultry rearing and plastics production could be straightforwardly electrified or partially electrified. Based on a document produced by the Sandiara local authority that outlines existing businesses at Sandiara SEZ, we assess that businesses directly supporting 3,000 jobs at Sandiara could benefit from electrification processes.

Senegal's green industrial potential cannot be assessed at the national scale alone. The country is a key member of the WAPP, created by the Economic Community of West African States (ECOWAS) in 1999 and regulated at the regional level by the ECOWAS Regional Electricity Regulatory Authority.

Cross-border electricity trade across the region remains modest - only a small fraction of regional power, roughly 7 percent, is currently traded through the pool - but a regional electricity market is now being developed to deepen integration. For a country with strong, geographically concentrated renewable resources, the significance of this market is that any surplus generation can be exported and used to power emergent green industries in neighbouring countries.

Despite the benefits associated with green industrialisation, campaigners should always ask 'who benefits?' and emphasise the risks associated with land contestation, biodiversity and conservation. Experience in other countries has demonstrated the sensitivity associated with installing solar and wind without sufficient community consultation prior to development. Unless communities are consulted, projects risk facing local backlash. In particular, history indicates that vulnerable or unhoused citizens are most at risk from renewable energy developments.[50] Above all, the question of who gains from the energy transition must be forefront in campaigners' minds. Senegal also is home to some of the world's most significant biodiversity areas, including the Saloum Delta National Park, a UNESCO World Heritage Site. Campaigners should ensure environmental impact assessments are conducted during pre-implementation of renewable energy sites and closely scrutinise their findings.

In light of the above concerns, campaigners should insist on the following technical specifications for any renewable generation assets associated with green industrialisation:

1. Renewable energy installations cannot be built on no-go areas;
2. Minimum setback distances should be guaranteed to ensure that solar installations do not encroach on other property;
3. Biodiversity assessments should be conducted to identify the risk of flora and fauna loss in the proposed development area;
4. Community benefit-sharing rules should be implemented to ensure that local communities benefit from the electricity generated in their areas; and
5. Project proposals should explore the opportunities for complementary land use such asagrivoltaics, where land use is allocated for energy generation and agricultural use.

Conclusion

Senegal stands at a pivotal moment in its energy transition. The country has already demonstrated a serious commitment to renewable energy – through its Just Energy Transition Partnership, the development of utility-scale solar and wind installations, and the establishment of Special Economic Zones intended to catalyse green industrialisation. Its ambition to reach 40 percent renewable electricity by 2030, combined with one of the highest electrification rates in sub-Saharan Africa, provides a strong foundation on which to build.

This report has made the case for scaling up green industrial zones in Senegal – which could easily map onto Senegal's ambitious plans to expand its Special Economic Zones. Spatial analysis conducted by the University of Technology Sydney identifies compelling opportunities for solar, onshore wind, and offshore wind development across the country, with particularly strong potential in the north and along the Atlantic coast. The SEZs at Louga, Bargny–Sendou, Diamniadio, Diass and Sandiara represent the most strategically promising locations for early investment.

Crucially, the development of these zones must be guided by the interests of Senegalese communities. Rural populations require affordable, reliable electricity and a meaningful share in the governance and ownership of the assets built in their areas. Businesses and industrial actors need competitive electricity prices to unlock the productivity gains that green industrialisation promises. Achieving these outcomes will require coordinated action across three groups of actors: international donors and development finance institutions, the Senegalese government and Senegalese civil society. The recommendations that follow set out what each must do.

Policy Recommendations

For Senegalese Policymakers

Mandate renewable energy in all new Special Economic Zones. Senegal's ambition to develop 45 SEZs presents a unique opportunity to embed renewable energy as a standard requirement from the outset. The government should revise the legislative framework for SEZs to require that all new zones source a minimum share of their electricity from on-site or locally-contracted renewable generation, and set a timeline for existing zones relying on natural gas, such as Sandiara, to transition away from fossil fuels.

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Engage with the SEZ planning process to embed local procurement and skills development. As Senegal moves to develop 45 Special Economic Zones, civil society organisations should engage with the planning and approval processes for individual zones to advocate for local content requirements, apprenticeship programmes, and skills development initiatives linked to renewable energy installation and maintenance. Ensuring that SEZ development generates lasting local employment, rather than relying predominantly on imported labour, will be essential to delivering a just transition.

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Appendix 2
Siting solar and wind in Senegal

The 2,934 electrifiable jobs figure cited in Section 4 report can be derived from summing the direct jobs associated with companies categorised as having 'High' electrification potential in Table 3.

Table 3. Sandiara SEZ companies ranked by electrification potential

No	Company	Country	Social object	Direct jobs	Electrification potential	Key constraint
1	Omega Pelagic	Morocco	Freezing of seafood	350	High	None. Proven model for cold chains in West Africa ,
2	Zalar Holding (4 factories)	Morocco	Poultry: nutrition, hatching, slaughter, meat processing	230	High	None. All processes electrically driven
3	Solance	India	Automotive, solar and home batteries; inverters	700	High	None. Industrial processes are already electric.
4	Friamar (2 factories)	Russia	Aquaculture	500	High	None. Proven examples of electrification of aquaculture
5	Laiterie du Berger	Senegal	Manufacture of dairy products	600	High	None. Pasteurisation and refrigeration fully electric

6	Sunulait	Senegal	Manufacture of dairy products	200	High	None. As above
7	Bel Meal	Morocco	Fish flour and fish oil production	124	High	Electric heat pumps needed for drying stage
8	Lipak	France/Tunisia	PET products; injection of preforms and plugs	60	High	None. Extrusion and moulding energy-intensive but fully electric
9	Bioplast	France/Tunisia	Biodegradablebags; film; fish crates; PET recycling	60	High	None. Continuous load suits solar and battery
10	La Mama	France/Tunisia	Mineral water and agro-food processing	60	High	None. Pumping and bottling processes are fully electric
11	Ocedis Exports	France	Water treatment products and materials	20	High	None. Small load, straightforward conversion
12	Bi-Tech	France	Polystyrene construction panels	30	High	None. Moulding and cutting fully electric
13	Finish Profiles	Holland	Industrial production; trade; construction; logistics	200	Partial	Mobile construction machinery are energy-intensive and may need liquid fuels in the short-term
14	Alisei	Italy	Tannery	200	Partial	Thermal drying and finishing can draw on solar energy
15	Westpharm	India	Injectable pharmaceutical solutions	200	Partia	Very high reliability requirement; grid backup likely needed to comply with Senegalese law

16	Gravita Senegal	India	Recycling of nonferrous debris	200	Partial	Peak smelting electricity load would require grid connection
17	Plac'Force	France	Plaster and metal profiles	200	Partial	Plaster kilns not yet widely electrified at scale
18	OCP Senegal	Morocco	Fertilizer production	200	Partial	Green hydrogen pathway needed for ammonia-based products
19	Adeos	France	Power station	100	Partial	Fundamental gas dependency. Key target for solar/gas hybridisation
20	Hua Xia	China	Iron production	1,000	Low	Requires very large stable baseload; full electrification achievable in long term