POWERING

THE

PLUNDER

What Morocco and Siemens are hiding at COP22, Marrakech
Western Sahara Resource Watch (WSRW) works in solidarity with the people of Western Sahara researching and campaigning against Morocco’s resource plundering of the territory. WSRW is a wholly independent international non-governmental organization based in Brussels.

To strengthen our research and intensify our international campaigns, WSRW needs your help. Learn how to make donations at www.wsrw.org.

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Medico international is a German relief and human rights organization that provides medical supplies and training to the Saharawi refugee camps in Algeria www.medico.de

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<td>CDM</td>
<td>Clean Development Mechanism</td>
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<td>Court of Justice of the European Union</td>
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<td>DNV</td>
<td>Jet d’Air et Verts</td>
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<td>GW</td>
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<td>MW</td>
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<td>OCP</td>
<td>Office Chérifien des Phosphates</td>
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<td>ONEE</td>
<td>Office National de l’Électricité et de l’Eau Potable</td>
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<td>SIE</td>
<td>Société d’Investissement Énergétiques</td>
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<td>UNDP</td>
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EXECUTIVE SUMMARY

Beware of what you are told about Morocco’s efforts in the renewable energy sector.

An increasing part of the renewable energy programmes that Morocco is promoting – even on the official COP22 website – are not taking place in Morocco at all, but in Western Sahara, which it illegally and brutally occupies.

Both the Moroccan government and a handful of renewable energy companies will actively market their efforts for the development of green energy solutions during the COP22 climate talks in Marrakech, 7-18 November 2016.

22 newly built mills by the German company Siemens supply 95% of the energy required for the highly controversial plunder of non-renewable minerals from Western Sahara. The green energy production is making Morocco’s plunder of the territory even more lucrative.

Siemens and the Italian company Enel are those most heavily involved. They won Moroccan tenders in Western Sahara by partnering with the energy company owned by the king of Morocco. When the Moroccan royal palace – which regulates the energy market – receives large energy contracts in the territory, it comes at a high price for the UN peace process in Western Sahara. By exporting the energy to Morocco proper, the country and the royal family anchors its connection to the territory. Would the king be interested in a process of self-determination and decolonisation in Western Sahara when he himself is benefiting from the Moroccan army’s illegal presence there?

The legal owner of the land, the Saharawi people, have never consented to the Moroccan projects. Half of the territory’s original population has fled the country since Morocco invaded it in 1975. Leading opponents of socio-economic marginalisation of the Saharawis are serving life sentences in Moroccan jails.

This report details how Morocco plans to build over 1000 MW (megawatts) of renewable energy plants in Western Sahara. As of today, the controversial energy production from solar and wind sources in Western Sahara constitutes at most 7 percent of Morocco’s total energy production from such sources. By 2020, the amount could be increased to an astonishing 26.4 percent.

Western Sahara Resource Watch demands the involved companies to terminate such infrastructure projects in Western Sahara with the Moroccan government, in order to not lay obstacles to the UN peace process.
Nearly every week, a bulk vessel docks at the port of El Aaiún in occupied Western Sahara, loading and departing with a cargo of phosphate rock. For 40 years, Morocco has exported this non-renewable, strategic and valuable mineral, selling it to fertilizer producers overseas. The trade is not well received by responsible investors internationally. Several importers have ceased their purchases after learning of the controversies, and dozens of banks and pension funds have divested from companies engaged in the trade. The exports are in general seen as violating international law and the rights of the people of the territory to manage their own resources.\(^1\)

Over 95% of the energy needed by the Moroccan state phosphate company, OCP, in El Aaiún is provided by a farm of 22 Siemens windmills, according to the phosphate exporter’s own webpage.\(^2\)

In other words, 22 Siemens windmills, claimed to be a ‘sustainable’ contribution to Morocco’s energy demand, are today powering the entire controversial phosphate exports from the occupied territory. For the year 2015, WSRW estimated the income from the mine to be 167.8 million USD.\(^3\) Due to the involvement of Siemens, the profit margin increases.

“Foum El Oued will be built in one of the windiest areas of Morocco in the municipality of Laâyoune, 9 km south east of the port of Laâyoune in Southern Morocco”, a Siemens press release of January 2012 reads, announcing that the firm had obtained an order for the Foum El Oued farm.\(^4\) The 22 mills happen to be located right next to the phosphate plant. Naturally, the town is not in Morocco, but in Western Sahara. Laâyoune is the Moroccan spelling of the Saharawi capital city.

“Foum El Oued is located in a region that according to the United Nations is currently subject to a UN mission”, Siemens added to the press release in September 2012, after WSRW had asked the company not to enter in contracts for infrastructure on occupied land. The press release is still there on the Siemens website, claiming that the farm is in Morocco.

The electricity generated at Foum El Oued is used for three main functions: the extraction of the phosphate rock, its transport over a 100 km long conveyor belt to the port and sea water desalination.\(^5\) Siemens’ Moroccan partner Nareva confirmed that the Foum El Oued wind production was destined for OCP.

As if this is not enough, Siemens has even larger projects in the pipeline.

In December 2015, Moroccan media announced that a Danish division of the German multinational company Siemens, Siemens Wind Power, had been accorded a contract to construct five wind farms in Morocco.\(^6\) However, two of these planned farms will be outside of Morocco’s internationally recognized borders, in Western Sahara (see page 8-9).

While waiting for the two new large farms to be constructed, the Siemens fans are spinning in El Aaiún, to the benefit of the Moroccan state phosphate company. One single shipment of phosphates can be worth as much as a third of the entire annual humanitarian aid to the refugees from Western Sahara, who are the owners of the mineral.
In 2016, Operational Farms

BOUJDOUR (100 MW)
- Commissioning expected in 2020.
- Carried out by Siemens, Enel Green Power and Nareva Holding.
- The contract consists of development, financing, construction, operating and maintenance of the site, under a Build, Own, Operate and Transfer (BOOT) scheme.

TISKRAD (300 MW)
- Commissioning expected in 2018.
- Carried out by Siemens, Enel Green Power and Nareva Holding.
- The contract consists of development, financing, construction, operating and maintenance of the site, under a Build, Own, Operate and Transfer (BOOT) scheme.

FOUM EL OUED (50 MW)

IN 2020, AFTER COMPLETION

CIMAR (5 MW)
- Inaugurated in 2011 at the factory of Ciments du Maroc (CIMAR), a cement grinding factory owned by Italcementi Group.
- The wind farm was constructed by Italgen, a spin-off of Italcementi that operates in the renewable energy sector.
- The farm is dubbed Driss Cherrak, and is composed of a small 150 kW turbine that was installed in 2003, and six 850 kW turbines that were installed in July 2011.
- The farm supplies the CIMAR factory with energy – any surplus is sold to ONEE through a partnership deal.

TOTAL MARKET SHARES OF WIND TURBINE SUPPLIES IN MOROCCO, INCLUDING IN OCCUPIED WESTERN SAHARA

- Siemens 51%
- Vestas 6%
- Gamesa 30%
- Alstom 13%
- GE 17%

In 2020, Operational Farms

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FOUM EL OUED (50 MW)
- Operational since 2013.
- Constructed by Siemens and Nareva.
- Consists of 22 wind turbines of the type SWT-2.3-101.
- The Siemens/Nareva contract was to deliver, install and commission the turbines, and a 5-year service contract.

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Morocco has massive plans for building windmills in occupied Western Sahara.

In 2010, the government decided to double its national wind energy production through developing an additional 1000 MW by 2020, 40% of that added capacity, or 400 MW, is to be developed within the occupied area.

From what WSRW can calculate, the share of the Moroccan production of green energy in Western Sahara is today around 55 MW out of 787 MW corresponding to a total of 7 percent.

The boom in such infrastructure in the occupied territory increases particularly as a consequence of what the Moroccan government refers to as the 'Integrated Wind Energy Program'.

The Integrated Wind Energy Program includes the construction of six wind farms, to be developed in two phases. The first phase is already in progress, and will be carried out in Morocco proper, in Taza. The second phase consists of the construction of the remaining five wind farms with a cumulative capacity of 850 MW.

Two of the five wind farms in the 850 MW project are located in occupied Western Sahara. In Boujdour, a farm with a capacity of 100 MW will be built. In Tiskrad, near El Aaiun, a 300 MW wind farm is to be constructed. This means that nearly half of the 850 MW capacity developed under the project will be located inside the part of Western Sahara that is occupied by Morocco.

In early 2012, the Moroccan agency for electricity, ONEE, launched an international tender, inviting companies to express their interest in a bid to construct the five wind farms under the second phase. In March 2016, ONEE officially announced that out of the six competing consortia, Siemens Wind Power, in grouping with Enel Green Power and Nareva, had been awarded the $1.2 billion contract. Both Siemens and Enel referred to the entire project as located in 'Morocco', failing to distinguish between Morocco and the land it illegitimately occupies.

Siemens, Enel and Nareva are thus contracted to build all five wind farms of the project, including two in occupied Western Sahara. The entire project will be structured under a 'Build-Own-Operate-Transfer' scheme (BOOT) and will be carried out under a public-private partnership with ONEE, the Energy Investments Company (SIE) and the King Hassan II Fund which are all state-owned. ONEE will buy all the generated electricity through a 20-year contract.

Nareva stated that the consortium won the tender because their bid was the cheapest, at an alleged 309 Dirhams per MW.

As part of the deal which was reportedly judged on both price and plans for local manufacturing, Siemens officially announced in March 2016 that it would build a rotor blade factory for wind turbines in Tangiers, northern Morocco. This constitutes an investment of €100 million.

Commissioning of all five wind farms, including the two on occupied land, is expected in the period 2017-2020. The entire program is part of Morocco’s ambitions to have 42% of its electricity capacity come from renewable resources by 2020. With regard to wind energy, the objective is to reach 2000 MW capacity by that time. Almost a quarter of that target capacity will come from wind farms in occupied Western Sahara. By 2020, the share from the occupied territory will have increased from its current 7% of Morocco’s total capacity, to 22.75% in 2020. Clearly, Western Sahara will play an important role in Morocco’s wind-energy plans.

For 2030, Morocco has set itself the target of achieving 5000 MW installed wind power capacity. In view of this ambitious goal, the Moroccan government will propose more large- and medium-scale wind projects in the coming years – including in the territory of Western Sahara.
The king of Morocco is not only the military, political and religious leader of Morocco. During his reign, he has built up a massive wealth, in a country ridden with poverty. The problematic double role of the royal family – being both regulator and owner – is visible in numerous business sectors.

**Such as renewables:**
- On 26 December 2015, the Moroccan government received royal instructions from Fouad El Himma - the king's senior advisor - to distance itself from all national strategies for renewable energy, which is now the sole responsibility of the Palace.
- The royal family owns 74% of the shares in the large private holding company Société Nationale d'Investissement or SNI which in turn owns the renewable energy company Nareva.
- Nareva wins tenders in Morocco and Western Sahara. Out of six consortia that applied for the tender in Western Sahara under the large Integrated Wind Energy Programme, Nareva emerged as winner in partnership with Siemens and Enel. The announcement was made in March 2016.

"From an ownership standpoint, the very existence of SNI is a challenge to Morocco's Constitution, of which article 36 forbids 'conflicts of interest' [and] all practices contrary to the principles of fair and free competition. In a country where the king is the supreme administrative and judiciary authority, are his corporations really held to the same standards as the other ones?"  
Le Monde, 10 February 2015

Deputy Minister of Interior who now heads the Party of Authenticity and Modernity Mohamed Mouiri Al Majdi who is the head of the King's private secretariat, and the King himself. This phenomenon seriously undermines the good governance that the Moroccan government is working hard to promote.

A leaked cable from the USA embassy in Rabat, dated December 2009, comments on the far-reaching commercial interest and influence of the king and of his advisors in the Moroccan economy. A former US Ambassador described it as "the appalling greed of those close to King Mohammed VI." Morocco's major investment decisions were in reality made by three individuals in the Kingdom: Fouad El Himma the former king's advisor and former Foreign Affairs Minister Taieb Fassi Fihri. Ali Fassi Fihri also belongs to the inner circle of Mouiri Majdi, who is both the king's Secretary and head of Siger – the main SNI-folding company. Another substantial holder is the Grps Holding. Both Siger and Ergs - anagrams of regs. Latin for King – belong to the royal family. Something that is public knowledge in Morocco, and admitted by the Palace's own lawyers.

Nareva today exploits a substantial number of the wind farms in Morocco properly, but it also holds ownership of all operational and planned wind plants in Western Sahara. The only exception is the 5 MW CIMAR plant, which is privately owned by Omenta du Maroc and provides electricity to their El Aaiun-based factory. The Foum el Oued farm is exploited by Energie Eolienne du Maroc (EEM), a 75% subsidiary of Nareva that was set up in 2010.

The two wind farms that are planned under the Integrated Wind Energy Programme, in Tiskrad and Boujdour, will also be part of Nareva’s portfolio. Through Nareva, the Moroccan king thus owns nearly all current and planned wind farms in the territory he holds under military occupation, in violation of international law.

Remarkably, Morocco’s interest in the wind potential of Western Sahara dates back to the time when former monarch Hassan II had ordered the construction of a farm complete with greenhouses near Dakhla in the southern part of the territory. Given the difficulty of supplying that remote farm with the necessary electricity, the Tensgar farm – now also known by the brand name Les Dames - became an experimental site in 1994 showcasing a 55 kW wind turbine.
Western Sahara is not part of Morocco. The UN considers it a Non-Self-Governing Territory – a territory that is yet to complete the process of decolonization. It is a basic requirement of international law that development in a Non-Self-Governing Territory such as Western Sahara cannot be undertaken unless there is consent from the people of the territory and the benefits are directed towards them. A legal opinion issued by the UN Legal Office in 2002 specifically addressed these issues. In October 2015, the UN Committee overseeing States' implementation of the Covenant on Economic, Social and Cultural Rights expressed its concerns that the Saharawis are indeed particularly affected by poverty. The Committee urged Morocco to respect the Saharawis’ right to prior, free and informed consent with regard to the exploitation of their resources. The African Union issued in 2015 a Legal Opinion concluding that ‘the people of Western Sahara and their legitimate representatives must not only be consulted but they must consent and effectively participate in reaching any agreement that involves the exploitation of natural resources in the territory of Western Sahara’. The AU Peace and Security Council has condemned the exploitation of Western Sahara’s natural resources, calling it ‘a hostile act likely to perpetuate the conflict and colonialism in Western Sahara’. It indicated that companies working in Western Sahara will not be welcome in other AU Member States. No states in the world recognize today the Moroccan claims on the territory. One of Spain’s highest court concluded in 2014 that Spain is still formally the administering power, as it never decolonized it properly. The Court of Justice of the European Union has echoed that statement in December 2015, asserting that Western Sahara ‘is not included in the recognized international frontiers of [Morocco]. As a consequence it ordered the application of the EU-Morocco agriculture agreement in Western Sahara to be annulled.

**1960**

The UN adopts resolutions 1514 (XV) and 1541 (XV) on the independence for colonial countries and peoples.

**1966**

The UN urges the colonial power Spain, under UN supervision, to hold a referendum in Western Sahara in accordance with the right to self-determination.

**1975**

A UN investigation commission that had visited Western Sahara finds full support for independence. No factions supporting the territorial demands of neighboring countries been encountered. The International Court of Justice states that the territory belonged to neither Morocco nor Mauritania prior to Spanish colonization. Morocco and Mauritania invades the territory. Half of population was forced to flee in the coming months. Condemnation by the Security Council.

**1976**

Spain formally withdraws, without having fulfilled its obligations. The liberation movement Polisario declares the Sahrawi Arab Democratic Republic (SADR).

**1979**

Mauritania withdraws and Morocco invades the area previously under Mauritanian control. The UN condemns the extension of the Moroccan occupation.

**1991**

Ceasefire. The parties agree to organize a referendum on independence and the UN Mission for The Referendum in Western Sahara (MINURSO) is sent to the territory.

**1999**

Mauritania withdraws and Morocco invades the area previously under Mauritanian control. The UN condemns the extension of the Moroccan occupation.

**2000**

MINURSO’s lists of eligible voters are concluded. After 8 years of delays, Morocco states it does not want referendum after all.

**2007**

Negotiations start between the parties. Morocco delays the talks. 8 years later, the UN Special Envoy expresses his frustration that Morocco does not wish to negotiate.

**2016**

For the second year, Morocco rejects visits to Western Sahara of the UN Special Envoy into Western Sahara. Morocco deniers UN Secretary-General access into Western Sahara and unilaterally expels 74 of the UN staff. In April, 5 of the 15 states in the UN Security Council abstains or votes against a resolution on Western Sahara. It is the resolution with least support for three decades, in any conflict. The mandate of the MINURSO operation is extended, remaining one of very few internationally without the possibility to report on human rights violations. French support to Morocco took away all critical reactions vis-à-vis Morocco. In August, Morocco violates the ceasefire, by sending troops into territory not yet occupied.

“**We, the Saharawis, who are the rightful owners of this territory, were not consulted by Siemens in relation to this windmill deal in our country. [...] Morocco does not own sovereignty over Western Sahara, It is an occupying power. Siemens should not be complicit in legitimising the illegal occupation of Western Sahara – the last colony in Africa – by Morocco.**”

Frente Polisario’s representative in Denmark, 2012.

**SUPPRESSING PROTESTORS**

In 2015-2016, the phosphate sector in Western Sahara – which the Siemens mills are providing the energy for – was a target of increasing Saharawi protests. The state owned phosphate company OCP had promised the creation of 500 jobs in the local phosphate plant – an enlargement that was possible because of the reduced electricity costs through the Foum El Oued wind farm. It quickly became clear that these new positions would not be accessible to Saharawis. As an already marginalized minority in their own land, many Saharawis cannot afford higher education – the main qualification criterion for the new jobs. Youth protests in demand of jobs and a decent living quickly spread through the territory. As is sadly standard practice, all Saharawi protests are indiscriminately met with disproportionate violence on the part of the Moroccan police and security forces. Some civil society activists who advocated the socio-economic rights of the Saharawi people have been sentenced to life-time in prison.
Morocco’s energy infrastructure on occupied land:

— Gives an aura of legitimacy to Morocco’s annexation of the territory in circumstances that continue to delay the Saharawi people’s exercise of self-determination and undermine the UN peace process;

— Involves large foreign companies in an already complex conflict dynamic through the construction of physical infrastructure inside occupied Western Sahara;

— Will, because of increased electrical capacity in the territory, allow additional Moroccan settlers to remain in Western Sahara. Worryingly, it appears that part of the electricity is intended for export to Morocco’s national grid itself. In turn, Morocco becomes even more economically connected to, and dependent on, the territory it has occupied;

— Risks reducing the motivation of the king of Morocco to engage with the UN in the decolonization process, because of his direct financial interest in the continuation of the stalemate;

— Contributes to Morocco’s taking of natural resources from Western Sahara, in violation of international humanitarian law. Energy obtained through these wind farms makes such industries more economically efficient;

— Will not create benefits for the Saharawi people who live in refugee camps in Algeria. The majority of this population has only limited access to electrical power, with resulting problems in terms of safety, food hygiene, education and limited social activities.

Investors turned off

European institutions have been clear: they do not want to fund energy projects in the occupied territory. The European Investment Bank, the EU and the German-government owned development bank KfW have explained that they will not finance projects located in Western Sahara. The 5 wind farm-package deal obtained by Siemens in 2016 comes at an alleged price tag of an estimated €1.24 billion. At the time when ONEE issued the tender for this 850 MW project, it boasted having solicited the financial support of institutions such as the European Investment Bank, the European Commission, the German institution KfW and the African Development Bank (AfDB). Moroccan media reported that the loans had already been secured well in advance of the tender.

However, the funding structure of the parks in Western Sahara was not as Morocco claimed them to be. "If we support those investments, it would look like we are supporting the Moroccan position. We are neutral regarding that conflict," one bank source told Reuters. KfW, which has had many plans for the renewable energy in Morocco itself, has in detail explained the measures it has taken to avoid its support to Morocco’s energy projects being used by its Moroccan counterpart for projects in Western Sahara. KfW Development Bank, like other donors, will only finance project executing agencies in Tanger II, Jbel Lahdith and Midelt, i.e. outside Western Sahara. Financing structure, financial flows and accounts are separated between the different project sites in order to ensure a clear distinction. This clear and strict separation holds true for all our financings, see also the PVI-program where we provide financing only for the Noor Ouarzazate project, but not for the two sites Boujdour and Laayoune. KfW wrote to WSRW in 2016. Funding from the European Commission and the European Investment Bank have also only been awarded to the sites in Morocco proper.

Instead, Moroccan private banks seem to have entered the scene to offer their support. WSRW has so far identified two such banks having provided funds to Morocco’s plans. Banque Populaire brags about its support to Foum El Oued “in the south” of Morocco in its Corporate Social Responsibility Report. BCME has also allocated funds.

Private banks are said to contribute between 70 and 80 percent of Nareva’s projects, while SNI has chipped in the rest. “The payback period on the investment […] is more than ten years”, stated Nareva’s CEO.

The African Development Bank, originally mentioned as a possible funder in 2012, has failed to respond to WSRW requests.

The Kingdom of Morocco does not have any mandate granted by the UN or by another international body for the administration of Western Sahara.”

While other bodies of the UN family explicitly state that they cannot support projects in Western Sahara, as the UN is trying to negotiate peace in the territory: the United Nations Framework Convention on Climate Change (UNFCCC) turns a blind eye to the whole question.

In 2015, it was announced that UNFCCC had decided to accept Marrakech, Morocco as the location for the 22nd Conference of the Parties (COP22). But this picturesque venue comes at a high price. Allowing the Moroccan government to host the world’s most important climate platform provides them with a unique opportunity to market and showcase their controversial green energy infrastructure projects on occupied land – land that is subject to a UN peace process, no less.

The COP22.ma website, set up by the Moroccan Ministry for the Environment, advertises what are called Morocco’s flagship projects: Morocco’s renewable energy projects inside its national territory, but also in occupied Western Sahara. All underneath the COP22 logo. COP22.ma is referred to by the Moroccan government on the website of UNFCCC as the official site of the COP22 meeting.

It is not the first time that the UNFCCC has come close to greenwashing the brutal occupation. In 2010, Nareva Holding had requested carbon credits from the UN Clean Development Mechanism (CDM) for the Foum El Oued wind farm. However, in January 2012 the certifying company DNV (Det Norske Veritas) turned down the proposal before it came to the CDM for approval. A DNV spokesperson stated that the firm originally believed that the wind farm was to be built in southern Morocco, but after a while began to suspect that this was not the case.

“When we visited the project, it became clear that our suspicions were justified. It was therefore fairly simple on our part. In January [2012] we disclosed that we would be negative to the project”, the spokesperson told the media. CDM subsequently decided to cancel the project in April 2013. A year later, the Verified Carbon Standard (VCS) registered the Foum El Oued wind farm on the private carbon market instead, after having received a positive appraisal by the certification company SGS UK Ltd.57 Foum El Oued wind farm can thus obtain carbon credits, which can be traded in for hard cash through the voluntary carbon market which is less regulated than the UNFCCC and Kyoto-underpinned compliance market.

UNFCCC wrote to WSRW that it does not intend to reject a priori all applications located in Western Sahara. That is in contrast to other UN bodies. UNDP has expressly stated that it does not intend to support programs south of the internationally recognized border between Morocco and the territory the kingdom annexed in 1975. All of UNDP’s agreements with the Moroccan government ‘explicitly state that the projects’ activities are restricted to particular localities north of the UN line’ and are limited to the internationally recognized borders of Morocco. The World Bank stated that it will not support projects in Western Sahara. Similarly, UNESCO has stated that it will not support projects in Western Sahara as that would run counter to its obligation to adhere to the Resolutions of the UN Security Council on Western Sahara.

The UNFCCC thus seems to deviate from the rest of the UN family, and now risks being misused for the promotion of infrastructural programs by an occupying regime in a territory in which the UN is trying to negotiate a solution respecting the rights of the Saharawi people to determine for their own future.

“Any references by Parties to the Convention to projects or activities made in the context of the UNFCCC process or containing references to it do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or of the UNFCCC concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.”

UNFCCC, regarding Morocco’s COP22 propaganda, 9 Oct 2016

“Please be assured that the secretariat is fully cognizant of, and abides by, the relevant United Nations resolutions and policies on the matter of Western Sahara” UNFCCC stated in a letter to WSRW on 9 October 2016.
The EU, a net energy importer, has set itself the mid-term target of a 27% renewable share by 2020. Whereas that goal could be reached through harnessing indigenous renewable energy sources, the Union may need to tap into external sources in order to further decarbonize its energy supply in view of the 2050 horizon.

Morocco, which has become a frontrunner in the renewable energy race, would make an ideal partner. Euro-Mediterranean energy cooperation is on the EU’s agenda in the context of creating an EU Energy Union and of revising the EU Neighbourhood Policy. The migration crisis and energy security concerns during the Crimea crisis have underlined that developments in southern Mediterranean countries are important to the EU. The idea of securing alternative energy suppliers, while helping to stabilize the southern Mediterranean, is well received among the 28 Member States.

There is already one functional interconnection between Morocco and Europe, connecting Tarifa (Spain) to Fardioua (Morocco). At present, it consists of three submarine cables operated jointly by Red Eléctrica de España and ONEE. Today the cables are used to export energy from Spain to Morocco to help meet the country’s power shortfall.

Whether a reversed supply is achieved remains to be seen. The Desertec project, a German-industry backed plan to source 15% of Europe’s energy from North African desert solar by 2050, had collapsed by 2014. One of Desertec’s founding partners was Siemens. The Mediterranean Solar Plan, a crown jewel of the intergovernmental Union for the Mediterranean, envisioning closer energy cooperation between the northern and southern Mediterranean countries, was de facto dissolved in 2013 due to lack of political support.

The Moroccan government has set up an investment company to financially support its plans: the Energy Investment Corporation (SIE), which has a 1 billion Dirham capital (approximately 100 million USD; 71% from the State, 29% from the Hassan II Fund for Economic and Social Development). Financial resources are also being mobilized under the Energy Development Fund (FDE), a financing institution that was created in 2009 and serves as a central pillar of the government’s strategy to enhance energy security and pursue low-carbon growth. The FDE has received donations from Saudi Arabia, the United Arab Emirates and from the Hassan II Fund.
Trying to get an answer from Siemens is a marathon exercise. Western Sahara Resource Watch first contacted Siemens on 6 March 2012 regarding human rights principles which the company claimed to support. On 10 May 2012, Siemens sent WSRW a letter containing a public statement it had issued on 2 April 2012. The statement explains that Siemens “does not intend to make a political statement on the status of the region. Regardless of political disputes, we believe that a working infrastructure will help to improve the economic conditions, and as a consequence the situation of the people in the West Sahara.”

The participation of Siemens in this project is permissible under the applicable laws and regulations and does not infringe on the right of self-determination or any other human right in public international law. Siemens wrote regarding Foum el Oued on 19 June 2012, 20 December 2012, and 3 July 2013. WSRW sent letters to Siemens regarding human rights and what the company had done to seek the consent of the Saharawi people. The letters were not responded to. The last letter sent to Siemens was in September 2016.11

10 October 2016, Siemens wrote to WSRW saying it did not want to refer to the status of Western Sahara. “Thus also not going into WSRW’s question regarding the rights of the Saharawis. Their reply suggests they have not even tried to find out the context in which the mills are operating, nor that the energy supplies near all the energy to Morocco’s controversial mining sector in the territory.”

“Your questions that deal with the legal and political status of Western Sahara deal with matters of international public law. It is therefore the responsibility of the subject of international public law (such as international bodies, states and others) to deal with these matters. The views of NGOs are, of course, also of great value. Companies like ours, on the other hand, refrain as a matter of policy from taking positions or making judgements on such issues,” the company wrote.

Already when Enel’s subsidiary Enel Green Power was bidding in the tender on 3 July 2013, WSRW sent the company a letter asking them to withdraw. “The Enel Group’s policy is not to take any position on political matters. We are therefore unable to respond to questions on such topics as territorial sovereignty.” Enel Green Power replied on 10 October 2016.12

Based on that answer from Enel – stating it does not want to take position on political matters – WSRW responded on 11 October 2016, asking why the firm had then chosen to start operating in occupied Western Sahara with the Moroccan king’s energy company and on top of that referring to the location as “Morocco.” At the time the report was sent to printing, WSRW was still awaiting a response. The company has offered to meet.

WSRW in 2013 contacted Nareva through all addresses we had found the company to provide externally including in project descriptions submitted to UNFCCC in order to be eligible for carbon crediting. However, all emails sent have bounced back. The company does not have a website.

Siemens phosphate mills just arrived in El Aaiún harbor, March 2013, to feed Siemens ‘phosphate mills’ just arrived in 2013, to feed Siemens’ phosphate mills. Siemens wrote regarding Foum el Oued in 2016.79

“Wind farms are fundamentally different from, say, mines, which extract finite resources in an irreversible way. The wind in Western Sahara, in contrast, is a renewable source of energy, and the operation of wind farms in no way diminishes it.” Siemens, to WSRW on 11 October 2016.4

“Out of the five projects, Midelt (150 MW), Tanger (100 MW) and Jbel Lahdidi (200 MW) are located in northern Morocco while Tiskrad (300 MW) and Boujerd (100 MW) are located in the country’s south.”

Enel Green Power, as it won a tender with Siemens and Nareva on 10 March 2015.14

Other companies involved on the Foum el Oued “phosphate mills”

In 2015, the Italian company Enerlog took part in the mounting of the 22 wind turbines.

German company Lahmeyer International were key in leading the project and in providing technical expertise. From the beginning Lahmeyer, in turn, subcontracted Turkish company IKA Enerji for supervision of the construction and Engineering company Technipjéret for electric engineering.

The French company Alstom (whose power division was later acquired by General Electric) has supplied equipment.

The French Groupe Vincor took part in the construction work, with equipment from Basque/Spanish Ormatabazal.

Dutch German and UK vessels may have been involved in the transport of wind turbine parts from Denmark and Portugal to the El Aaiûn harbour.

Global Wind Service, from Denmark, supported Siemens Morocco with a number of experienced paintmen and fibre technicans. WSRW asked for clarifications and has not received answer.

The Moroccan companies Delattre Levivier Maroc and EuroGrues Marc are producing the towers for the mill and supplying the cranes respectively.
Morocco’s renewable energy aspirations in Western Sahara are not limited to wind energy. The Moroccan Solar Plan was announced in November 2009 in the presence of the Moroccan king and then US Secretary of State Hillary Clinton. The project aims to achieve an installed capacity of 2000 MW by 2020 spread over five sites. Two of those sites are located in occupied Western Sahara and will together provide 30% of the total envisioned capacity of the Moroccan Solar Plan.

The Boujdour site will host a solar thermal plant of 100 MW capacity, which is referred to as Noor Boujdour. At the Foum El Oued site, just south of Western Sahara’s capital city El Aaiún, a 500 MW solar plant will be constructed on a surface area of 5,700 hectares. That plant, now also referred to as Noor Laayoune, will be connected to the grid providing electricity to Agadir and El Aaiún.

The Moroccan Agency for Solar Energy (MASEN) has already issued a tender for the first phases of both these plants. The so-called Noor PV I project will include the construction, operation and maintenance work of a total of 170 MW in three sites; 70 MW at Ouarzazate (in Morocco proper), 80 MW at El Aaiún and 20 MW at Boujdour. MASEN has pre-qualified no less than 20 consortia, grouping together 37 international companies. One of those companies is Enel Green Energy, which is running by itself.

Through the planned wind and solar projects, Morocco aims to have an operational capacity of 1055 MW in occupied Western Sahara by 2020. According to our calculations, that corresponds to 26.4 percent of the total wind and solar capacity that the Moroccan government aims to have up and running by that year.


10. This calculation includes the cement producer Lafarge and CIMPAR wind farms, though they primarily produce energy for the factory sites where they are located, is excess to Morocco’s National Electricity Agency ONEE. If looking at operational plants (total of 787 MW), plants in Western Sahara constitute 7% out of total operational capacity (if CIMPAR is included, it is CIMPAR excluded, 6.4%). If looking at operational and plants currently in progress (total 150 MW), the Western Sahara share becomes 4.8% if CIMPAR is included, 4.3% if excluded.


14. ONEE. January 2012. Aide de pré-qualification internationale. Invitation internationale à l’expression d’interêt en vue de la préqualification des entreprises W’P 40 40. The second phase includes also the provision and maintenance of equipment needed for the expansion of the Koudia Al Baida wind farm in Morocco proper.

15. Tel. 01.03.2016. Nareva reporté « officiellement » le projet éolien intégré des 850 MW. http://telquel.ma/2016/03/01/nareva-reporte-officiellement-projet-olien-intregee-850-mw-2436886 The information about the winner of the tender was already announced in Moroccan media in December 2015.


“The Court’s conclusion is that the materials and information presented to it do not establish any tie of territorial sovereignty between the territory of Western Sahara and the Kingdom of Morocco or the Mauritanian entity. Thus the Court has not found legal ties of such a nature as might affect the application of General Assembly resolution 1514 (XV) in the decolonization of Western Sahara and, in particular, of the principle of self-determination through the free and genuine expression of the will of the peoples of the Territory.”

International Court of Justice, 16 Oct 1975