Greenwashing the Naqab

The Israeli Industry of Solar Energy

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Who Profits from the Occupation is a research center dedicated to exposing the commercial involvement of Israeli and international companies in the continued Israeli control over Palestinian and Syrian land. Who Profits operates an online database, which includes information concerning companies that are commercially complicit in the occupation. In addition, the center publishes in-depth reports and flash reports about industries, projects and specific companies. Who Profits also serves as an information center for queries regarding corporate involvement in the occupation. In this capacity, Who Profits assists individuals and civil society organizations working to end the Israeli occupation and to promote international law, corporate social responsibility, social justice and labor rights.

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Methodology

This flash report is based on both desk and field research, as well as the research conducted for the in depth report "Greenwashing the Israeli Occupation: The Solar Energy Industry and the Israeli Occupation" published by Who Profits in February 2017. The desk research includes the collection and analysis of information from various public sources, such as company records and publications, public tenders, documents of the Registrar of Companies, newspapers and other media sources, archives of photography agencies and publications by various state authorities (including Israeli government ministries). The field research consisted of visits to Israeli industrial zones and commercial solar fields generating solar energy. Prior to publication, we contacted all the companies mentioned in this report and requested their comments and responses. As of the date of publication, no responses have been received.

Greenwashing the Naqab Desert

This flash report comes as a follow up report for Who Profit's in depth report titled "Greenwashing the occupation: The solar energy industry and the Israeli occupation", which was published in February 2017. While the latter exposes the political economy of Israeli solar energy in the occupied West Bank, particularly in the Jordan Valley area, this flash report sheds light on Israel's capitalist ventures of solar energy projects in the Naqab (Negev) area where the native population of Palestinian Bedouins, faces acute and severe living conditions alongside forcible displacement policies.

As exemplified below, due to Israel's dispossession of Palestinian electricity networks in the Naqab, the Palestinian population and economy suffer immensely from a chronic electricity crisis, which directly precludes economic growth and impedes long-term development. In recent decades, the Israeli government has focused on the Naqab desert as the next location for its Israeli urbanization and industrialization projects. While supported also by the "Negev Development Authority", this Israeli policy is directly leading to the de-development of the Bedouin native population and economy. According to current governmental publications, the coming decades in the Naqab desert will see rapid economic changes. In fact, in the upcoming years, amounts exceeding 30 billion NIS will be invested by governmental and private entities into new Israeli industrial, military, and civil projects. Construction projects of a new military center and a new industrial park are already set in motion and will soon materialize into facts on the ground.

As development investments are poured into Israeli projects in the Naqab, the Bedouin economy suffers immensely from chronic deficit. Until today, Bedouins of the Naqab are the most vulnerable community in Israel, ranking at the bottom of the socioeconomic ladder. For over 60 years, the indigenous Arab Bedouins

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have been engineered into a cheap labor class, facing a State policy of dedevelopment, <u>displacement</u>, and <u>dispossession of their ancestral land</u>. As a result, they have been systematically denied a <u>viable local economy</u>.

Palestinian Bedouin citizens live in 35 villages which the Israeli State considers "unrecognized" and denies these citizens access to water, electricity, sewage, education, healthcare and roads. According to the Adalah Legal Center: <u>"The State deliberately withholds basic services from these villages to "encourage" the Arab Bedouin citizens to give up their ancestral land"</u>.

The construction of the large scale solar panel fields in the Naqab is starkly contrasted with the lack of services such communities receive, while facing a systematic policy of forcible displacement.

The Naqab area was the first to witness Israel's newly licensed solar commercial fields that have been expanding ever since their initial establishment in 2011. At present, according to Who Profits' findings, there are 6 major solar fields, producing each over 5 MW of electricity. Together, these fields take up 210 hectares of land, and generate 224.5 MW of green electricity.¹

All electricity generated from Israeli solar fields, including those in the West Bank, is sold to the Israel Electric Corporation (IEC), a government-owned public company that "generates, transmits, distributes and supplies most of the electricity used in the Israeli economy."² The price paid by the IEC for solar-based electricity is four times <u>higher</u> than for regular electricity.³

¹ According to Who Profits' findings Ketura Field takes up 8 Hectares of land and generates 5 MW; Ramat Hovav Solar field takes up 48.5 Hectares of land and generates 37.5 MW of electricity; Ashalim solar field takes up 75 Hectares of land ang generates 121 MW of electricity; Zmorot solar field takes up 60 Hectares of land and generates 50 MW of electricity; Sde Boker takes up 9 Hectares of land and generates 55 MW of electricity; Hatzerim field takes up 10 Hectares of land and generates 50 MW of electricity.

² Israel Electric Corporation, "What Does the IEC Do?," iec.co.il.

³ Liora Lukatch-Givon, "What Is a Solar System, and the Israeli Aspect" (Hebrew), greentops.co.il.

Solar fields and Corporate Involvement in the Naqab Desert

Generally, Israeli economic support of Israeli and multinational enterprises are regulated through its "Encouragement of Capital Investment" law. This newly amended law allows companies, to receive grants, enjoy tax exemptions, and use generous loans for their operations if they choose to invest in "peripheral areas". According to article 40(C) of the law, the grant percentage given can reach its peak of 30% when <u>"building a factory in the Negev"</u>.

In 2009, the Israeli Government passed Resolution 4450, setting a guideline target of electricity generation from renewable energy sources. This resolution sets the target of 10% out of the country's energy needs in 2020, and calls for the building of power stations based on renewable energy sources in the Negev and Arava regions, of at least 250 megawatts each year. An interim target of 5% of electricity consumption coming from renewable energy sources <u>by 2014 was also set</u>".

Accordingly, Israel's implementation of this plan in the Naqab and the inauguration of solar commercial fields complements Israeli industrialization of the Naqab Desert, which is already underway. This industrialization comes directly at the expense of the native Bedouin population that are pushed outside their lands, stripping them from their sole means of livelihood.

Below are selected solar fields and involved corporations reaping profit from Israel's capitalist venture of solar energy in the targeted area of the Naqab.

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Ketura Sun Solar Field

Located on the southern edge of Kibbutz Ketura in the Naqab desert, Ketura Sun solar field is the first commercial solar field in the Naqab area and it covers an area of 80 dunams (8 hectares). The field was built by the Arava Power company together with the company Simens Israel, and is made of 18,500 PV solar panels, provided by the company Suntech.

Over the course of 20 years, Ketura Sun will offset the production of approximately 125,000 metric tons of carbon dioxide. In July 2015, Ketura Sun was connected to the Israeli national grid. There, 18200 panels produce 4.9 MW of solar power, which is able to send electricity to the 33,000 volt line to kibbutzim in the area.

In the <u>Hevel Eilot region</u>, where Ketura Sun is situated, only 4,000 people live on 13% of Israel's land. The construction of solar fields creates jobs (by some estimates 100 jobs per megawatt) and gives incentives to individuals and families to move to the area – thereby helping to fulfill another of Ben-Gurion's dreams of <u>populating the Negev</u>.

Cost of Field: 312.5 million NIS Equity Investment: 250 million NIS (80%) by Bank Hapoalim.

Arava Power Company

Profile: Founded in 2006, the company develops medium and large scale solar energy projects in the Naqab desert. Aside from Ketura Sun, the company has other projects developed in the Naqab; Elifaz Project with 24000 solar panels and 7 MW in capacity taking up 96 dunams of land; Grofit Sun Project with 22100 solar panels and 6,4 MW in capacity, taking up 84 dunams of land; Yotvata Sun Project with 23400 solar panels and 6.8 MW in capacity taking up to 88 dunams of land; Maslal Sun with 30,700 solar panels and 8.9 MW in capacity, taking up to 140 dunams of land

Ownership: The Arava Power Company is a privately held partnership, owned by the Israeli incorporated Global Sun Partners company. The seed money was provided by Kibbutz Ketura, David Rosenblatt and Yosef I. Abramowitz, and a group of about 100 private investors.

CEOs: Cohen Yonatan, Rosenblet David and Hoffland Ed.

Revenues: Although it has yet to generate its revenues its investments have reached one billion NIS.

Partners: Simens, Pheniox Holdings.

Head Office: Kibbutz Ketura, D.N. Hevel Eilot, 88840 Israel.

Website: http://www.aravapower.com

Ramat Hovav Solar Field

Located in Ramat Hovav (Neot Hovav) Industrial Zone, Ramat Hovav solar commercial field has been operational since December 2014, producing 37.5 MW of electricity. The publicly traded company <u>Energix Renewable Energies</u> owns the field and its 400,000 solar panels were provided by the U.S company Solar First. The field was completed in November 2014, and it is Israel's largest PV power plant thus far and one of the largest of its kind in the Middle East.

Cost of field: The construction and financing was done with Deutsche Bank (65%) and Energix (35%). According to Energix, the owner of the field, the generated revenues made of Ramat Hovav field reached 23 NIS million in 2015.

Energix Renewable Energies

Profile: One of the largest renewable energy companies in Israel, currently active in the field of solar and wind energies. Energix constructs and owns long-term renewable energy projects. The electricity generated by the company from its solar fields is subsequently sold to the IEC.

In December 2014, the company announced that Israel's biggest solar energy project, at Neot Hovav in the Negev, has received a permanent license for producing electricity. According to the company's estimates, power production which has an output of 37.5 megawatt will yield annual revenue of NIS 42-45 million for twenty years .The power produced by the plant will be transmitted via a sub-station to Israel Electric Corporation's national grid, and will be sufficient to power about 40,000 homes. Energix plans to set up an educational

¹² Greenwashing the Naqab

tourism center on the site on the subject of renewable energy.

Among its other solar projects is the Meitarim industrial solar field, located in the occupied West Bank and operating since 2015. According to Energix, Meitarim is expected to be "the most efficient out of all of our projects." While the annual operating cost of the Meitarim solar field is NIS 300,000, the revenues from selling the electricity to the IEC reached NIS 4.5 million in 2015.

In 2015, the company signed a contract establishing a designated company for the ownership of a massive turbine field, located in the occupied Golan Heights, to generate electricity from wind energy. The Golan Heights wind farm generates 155 MW of electricity, and the annual income generated from it amounted to NIS 180 million in the fiscal year 2015.

Traded: Publicly traded in the Tel-Aviv Stock Exchange (TASE).

Ownership: The company is controlled by Alonei Hetz Properties and Investments.

27.5% of the company's shares are publicly held.

Partners: The Company for the Development of Mount Hebron

Revenues: In 2015, Energix generated annual revenues of NIS 207 million: NIS 115 million from the sale of electricity, and NIS 92 million from other corporate activities. The company's current market value is estimated at NIS 900 million. However, the company predicts its income will be quadrupled in the coming years, reflecting the escalating tempo and economic development of the Israeli renewable energy industry as a whole. In 2015, Ramat Hovav field boosted the company's income by 4.5 times up to 17 million NIS. The project itself alone generated 13 million NIS (its total income was 16.6 million NIS in 2015).

Head Office: 7 Jabotinski St., floor 49, Ramat Gan, 5252007, Israel

Phone: +972-3-566-8855

Website: www.energix-group.com

Global Presence: The company is currently engaged in mutual energy projects with Polish companies, with a total capacity of up to 400MW.

First Solar

Profile: A US-based, global provider of solar energy equipment. The company designs, manufactures and sells Photovoltaic (PV) solar modules. Aside from equipment provision to Ramat Hovav solar field, the company provided its solar panels to the Kalia field, located in the occupied West Bank. The Kalia field has approximately 104,000 solar panels. During the field visits conducted by Who Profits, all of the solar panels documented, both installed and uninstalled, were manufactured by First Solar.

Traded: Publicly traded in the Nasdaq stock market.

Ownership: 56% of the company's shares are institutional holdings. The top 5 among the institutional holdings are: Vanguard Group (10.8%), Wellington Management Group (9.7%), State Street Corp. (4.59%), BlackRock Institutional Trust (3.7%), AQR Capital Management (3.6%).

CEO: James Hughes

Revenues and Income: First Solar's net sales reached USD 3.5 billion in 2015.

Subsidiaries: United States: First Solar Electric, First Solar Electric (California), First Solar Development, First Solar Asset Management, Maryland Solar Holdings, Maryland Solar, First Solar FE Holdings Pte. Malaysia: First Solar Malaysia Sdn Bhd. Germany: First Solar Manufacturing GmbH, First Solar GmbH. Vietnam: First Solar Vietnam Holdings; First Solar Vietnam Manufacturing. India: First Solar Power India Pvt. Chile: First Solar Eléctrico (Chile) SpA, Parque Solar Fotovoltaico Luz del Norte SpA. Australia: First Solar (Australia) Pty.

Head Office: 350 West Washington St., Suite 600, Tempe, Arizona 85281, USA Telephone: +1-419-662-6899

Global Presence: The oPt, US, Mexico, Brazil, Chile, Dubai, South Africa, Turkey, India, China, Japan, UAE, Australia.

Zmorot Solar Field

Located in the southern part of the Naqab desert, Zmorot solar field is a joint project of the French corporation of EDF Energies Nouvelles and its Israeli partner Solex. The 207,000- panel field began in 2010 and was completed in 2014. Today

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it is connected to the Israeli national grid and will sell electricity to the <u>IEC for</u> <u>the coming two decades</u>. According to the EDF Located in the Negev desert, the Zmorot photovoltaic power plant benefits from optimal insolation conditions for the generation of solar energy.

The Zmorot facility extends over an area of more than 60 hectares and consists of 200,000 photovoltaic panels supplied by Photowatt. With an installed capacity of 50 MWp, Zmorot generates electricity to cover the annual electricity needs of around 30,000 inhabitants for 20 years.

EDF

Profile: Founded by Pâris Mouratoglou, EDF Énergies Nouvelles is a French based global producer of electricity from renewable sources. The company develops, builds and operates green electricity power plants in 21 countries. Through EDF Energies Nouvelles Israel, a subsidiary of EDF Energies Nouvelles S.A., the company operates 10 solar facilities in Israel, with a total installed capacity of 110-160 MW, among which is the Zmorot solar field.

Ownership: EDF Energies Nouvelles is a wholly owned subsidiary of French electric utility EDF, a French electric utility company, largely owned by the French state. Headquartered in Paris, France, with €65.2 billion in revenues in 2010, EDF operates a portfolio of more than 120 gigawatts of generation capacity in Europe, South America, North America, Asia, the Middle East and Africa.

Subsidiaries: of the mother company Electricity of France: <u>EDF Energy</u>, <u>EDF</u> <u>Luminus</u>

Revenues: Revenues: Consolidated revenues € 1,139 M

Income: € 211 M

Subsidiaries and Partners: Solex; Solex has developed in cooperation with EDF EN twenty solar fields in Israel. Eleven of these fields began operating in 2013, and supply power at a rate of 160 MW. Zmorot - 50 MW | Ktura - 40 MW | Gvulot - 8.5 MW | Nachal Oz - 6 MW | Kerem Shalom - 6.4 MW | Lahav - 3.2 MW | Brur Hail - 8.8 MW | Mishmar Hanegev - 7.8 MW | Mizpe Ramon - 7 MW | Samar - 10 MW | Talmei Eliyho - 10 MW.

Global Presence: The company is active in 21 countries. In the solar energy market the company operates its fields in India, Israel, Greece, Italy, France, Spain, Chile, US and Canada.

Head Office: Head Office: Coeur Défense – Tour B 100, Esplanade du Général de Gaulle 92932 Paris La Défense Cedex

Tel: +33 (0)1 40 90 23 00

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Sde Boker and Hatzerim Solar Fields

Located in the Naqab Desert, the large solar fields of Sde Boker and Hatzerim generate 5 MW and 6 MW in electric capacity (respectively). The field was developed and initiated jointly by Suntech - a publicly traded Chinese company, and Shikun and Binuy - Israeli private construction company.

The solar panel provider for these fields is Enerpoint Israel - a subsidiary of the Italian Enerpoint, and a large distributor of Suntech products in Israel. The projects will generate up to 19.91 gigawatt/hours of electricity per year.

Cost of Field: The joint investments of Suntech and Shikun in the field reached \$20 million, making it one of the largest deals ever in the solar energy field in Israel.

Suntech Power

Profile: A China-based, global manufacturer of solar panels. The company manufactures, develops and delivers solar energy products. In addition to Suntech venture in the Naqab as shown above, the company has profited from other solar projects in Israeli settlements in the occupied West Bank.

In June 2016, Who Profits documented Suntech's solar panels in the Netiv Hagdud industrial solar field in the West Bank. Furthermore, in a joint partnership with the Israeli company Solarit Doral, Suntech co-built a solar power station in Katzrin, an Israeli settlement in the occupied Golan Heights.

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The Katzrin solar project generates 85,000 kWh a year.

Traded: A publicly traded company.

Ownership: Owned by Shunfeng International Clean Energy, the largest independent solar energy provider in China.

Revenues: The owner, Shunfeng Clean Energy Group, reported a revenue of RMB 7.03 billion (approximately USD 10.1 billion) for the entire group in 2015.

Partners: Enerpoint Israel and Super Ploy

Head Office: 9 Xinhua Road, New District, Wuxi Jiangsu Province, 214028, China **Website:** www.suntech-power.com

Global Presence: UK, Greece, Romania, France, Turkey, Italy, Spain, South Africa, Australia, Japan, Singapore, Switzerland

Enerpoint and Enerpoint Israel

Profile: The company installs and supplies photovoltaic panels for solar energy production. In February 2011, the Italian-incorporated Enerpoint completed the acquisition of the Israeli company Friendly Energy and established its Israeli subsidiary, Enerpoint Israel.

In addition to the company's activity in the mentioned fields in the Naqab, it is also invested in solar energy projects in the occupied West Bank.

Together with the Israeli company Green Is Us, Enerpoint invested more than USD 6 million in the industrial solar field Netiv Hagdud, an Israeli settlement in the occupied West Bank. In addition, the company has smaller scale solar projects in the West Bank settlement of Mishor Adumim and in other settlements in the occupied Syrian Golan.

Ownership: The Israeli subsidiary, Enerpoint Israel, is owned by Enerpoint SPA (80%), private investor Avi Mann (5%) and Friendly Energy (15%). The Italian parent company, Enerpoint, is owned by the founder and shareholder, Paolo Rocco Viscontini (62%), and Equiter of Intesa Sanpaolo (20%), the largest banking group in Italy. 34 private investors own the remaining 18%.

CEO and President: Paulo Rocco Viscontini (Enerpoint), Danny Danan (Enerpoint Israel)

Income: Enerpoint Israel's annual income exceeds NIS 60 million, and Enerpoint's income reached EUR 300 million in 2010.

Partners: Trina Solar Limited (NYSE: TSL)

Head Office: Enerpoint Israel - 21 Hamlacha St., Rosh Ha'ayin, 4809157, Israel

Enerpoint - Via Assunta 61, 20834, Nova Milanese (MB), Italy

Website: <u>enerpoint.co.il</u>

Global Presence: In addition to its Italian headquarters in Nova Milanese (near Milan), Enerpoint has offices in Quedlinburg (Germany), in Tel Aviv (Israel), in London (UK) and in Mechelen (Belgium).

Un-electrified Bedouin communities, Impoverishment, and Forced Displacement

As part of the Palestinian citizens of Israel, the Bedouin community has been historically facing dispossession and discrimination policies on the basis of their national belonging. Currently, Arab Bedouins in the Naqab are the most vulnerable group among Palestinians in Israel, positioned at the lowest rank on the socioeconomic ladder. Although the Bedouin population is around 170,000 persons, which is 14% of the Naqab entire population, the percentage of areas planned by the Israeli government for them is only 0.9% of the land. Opposite Israel's intensified efforts to develop and urbanize the Naqab through Israeli projects, it is working to forcibly displace and evacuate the so called "unrecognized villages", where the majority of Bedouins dwell. Currently, almost 90,000 Bedouins live in unrecognized villages on their ancestral land in the Naqab. They are characterized as <u>"trespassers on state land"</u>.

Continuous and relentless house demolitions, zero permit policy, and economic de-development, all comprise an integral part of Israel's forcible displacement plan in the Naqab. In that regard, the electricity crisis which Bedouins are forced to endure, comes as a complementary mechanism ultimately aimed at forced displacement, targeted dispossession, and Israeli land-grab.

The electrification process of the Bedouin unrecognized villages is rife with institutional obstacles and complexities, which are both deliberate and profitable for Israel. While turning on the switch in Israeli homes in the adjacent Kibbutzes and cities in the Naqab ensures quick and sufficient flow of electricity, many Palestinian Bedouin homes rely on a defective electrification process and others are not electrified at all.

In the most recent case of Um al-Hiran, the un-electrified community has owned the land for more than 6 decades. However, Israel's plan to destroy the "unrecognized" village was launched in 2003. Legalized by the Israeli Supreme Court, the plan is being implemented by Israeli forces who are carrying their evacuation policies with extreme police violence. In fact, <u>on the 18th of January and during a pre-</u><u>dawn raid</u> by hundreds of armed police on the village of Umm al-Hiran, a Bedouin civilian was shot dead by Israeli police force, leaving the community terrorized and in fear of collective exile.

Most Bedouin households in the Naqab, and all <u>"unrecognized villages"</u>, remain unconnected to the Israeli grid and completely cut off from electricity infrastructure. With no electrical network to provide them with light and with heating in winter they are either forced to leave or left to survive on limited gas electrification, which is both pricy and dangerous. For those communities, access to conventional electricity is challenging to say the least and solar energy is perceived as an unattainable privilege.

To access Bedouin-privately owned land, companies have signed contracts in which communities end up relinquishing these lands for the construction of solar fields. For example, the company of Arava Power signed 5 contracts with Bedouin families for building solar fields on 50 hectares of Bedouin privately owned land in the Negev. These contracts constitute the company's initial entry to solar energy production on Bedouin-owned land in the Negev. The mentioned solar fields are expected to produce 20 MW of electricity.

While the company calls it a social investment and <u>markets</u> it as cooperation with Bedouin communities, the conditions of these agreements and the validity of the communal "consent" obtained is not completely clear and opens the room for serious doubt over the sincerity of the company's alleged cooperation.

Conclusion

The decision by corporations to facilitate violations of human rights and international law cannot be removed from the systematic Israeli government policies of colonization and forcible displacement. Indeed, corporate involvements (through provision of equipment, installations and management of the sites) in such policies which violate business and human rights principles have been encouraged by the Israeli government.

Israeli and multinational corporations have been reaping immense profits from commercial and residential Israeli solar projects in the Naqab and the West Bank. From the planning and construction of solar projects, to providing equipment and technology, and ending in grid connections and maintenance, such corporations both benefit from and support the Israeli solar energy industry. It is through those capitalist endeavors that the occupation economy is fortified, at the expense of a crippled Palestinian economy.

In the case of the Naqab, not only is the Israeli industrialization weighing down on the Palestinian economy and hindering its development, it is directly exploiting Palestinian natural resources for the sole benefit of Israeli townships and residents.

While one arm of the State of Israel develops its commercial and residential solar fields exploiting Palestinian natural resources, the other destroys any potential Palestinian electricity lifeline. Moreover, Israel enjoys complete control over the Palestinian captive market, charging high electricity prices and maintaining the Palestinian Authority in a perpetual state of debt, thereby further undermining the fragile Bedouin community and Palestinian economy as a whole.

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