

## Solaer Renewable energies

26.05.2021



Stock Exchange  
**TASE**



Symbol  
**SOLR**



Sector  
**Technology**



Sub-sector  
**Cleantech**



Stock price target  
**NIS 72.8**



Closing price  
**NIS 40.6**



Market cap  
**NIS 907.6 Mn**



No. of shares  
**12.47 Mn**



Average Daily  
Trading Volume  
**381 stocks**



Stock Performance  
(since IPO)  
**-14.7%**

## INITIATION OF COVERAGE

Solaer Renewable Energy (TASE: SOLR) was established in Israel in 2019. The company originated from 'Solaer Israel,' which was established in Israel in 2009 as a subsidiary of the Spanish group 'Solaer,' which deals with renewable energies. The company initiates, develops, builds, operates, and maintains renewable energy projects in Israel and Europe.

**Market and trends** - Investment in renewable energy globally hit a high of \$350 billion in 2020, with solar PV and wind power accounting for \$290 billion of the total. A decade of high investment is forecast as the business case for renewables becomes ever stronger.

**The company's strategy is based on a develop-to-hold model and includes:** initiating long-term projects, securing assets before the market reaches saturation, selectively selecting opportunities while analyzing all the risks, and developing a significant projects pipeline.

**The company aims to continue creating value by leveraging its strategic partnerships, high access to projects, active operation division abroad, and proven expertise in working with landlords in Israel and internationally.**

**Our valuation** encompasses 24 identified clusters of projects. We calculated NPV for each project based on the probability of the projects and holdings percentage. Furthermore, we calculated other assets and liabilities the company has, as we elaborated later in our report.

**Based on all parameters, we evaluate the company's equity value at NIS 907.6 million; price target to be in the range of 68.1 NIS to 77.9 NIS with a mean of NIS 72.8.**

Year	Revenues* (000 NIS)	EBITDA* (000 NIS)
2021E	28,286	18,986
2022E	123,836	86,210
2023E	251,374	170,082

\*Represents 100% projects holdings



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## Contents

<b>Investment Thesis .....</b>	<b>1-5</b>
<b>1. Company overview.....</b>	<b>6-10</b>
<b>2. Technology overview .....</b>	<b>10-11</b>
<b>3. Markets overview .....</b>	<b>12-29</b>
<b>4. Competitive landscape.....</b>	<b>30-31</b>
<b>6. Financial analysis &amp; valuation .....</b>	<b>32-38</b>
<b>Appendix #.1: Capitalization Rate (WACC).....</b>	<b>39</b>
<b>Appendix #.2: About Frost &amp; Sullivan.....</b>	<b>40</b>
<b>Appendix #.3: Team biographies .....</b>	<b>41</b>
<b>Disclaimers, disclosures, and insights for more responsible investment decisions ....</b>	<b>42-43</b>

## Investment Thesis

Globally, the renewable energy sector is in growth momentum in most countries as a result of government decisions and organizations to reduce dependence on polluting fuels and reduce greenhouse gas emissions, which are reflected in governments' actions to meet renewable energy targets they are committed to according to the Paris 2015 agreement.

The implementation of government decisions translates into policies, regulations, and licensing processes of companies that build renewable energy electricity generating facilities that are supposed to provide electricity over many years in a reliable, safe and economical manner.

Solaer is well respected in its industry, both locally and globally. The company has successful experience across all steps and stages of renewable energy projects, including initiation, development, financing, construction, management, operation, ownership, and sale of assets. It has developed over 120 projects with an operational capacity of 2.2GW<sup>1</sup> under various stages of development, construction, and operation (total accumulated sharer of Solaer is approx. 1.2 GW).

**The company changed its strategy from a develop-to-sell to a develop-to-hold model, aiming to secure long-term income for the company from the possession of assets. Yet, Solaer will continue to examine the sale of minority shares to monetize part of its development gains. In addition, the company's strategy includes: initiating long-term projects, securing assets before the market reaches saturation, selectively selecting opportunities while analyzing all the risks, and developing a significant projects pipeline.**

**The company aims to continue creating value by leveraging its strategic partnerships, high access to projects, active operation division abroad, and proven expertise in working with landlords in Israel and internationally.**

**Solaer's value proposition to investors, partners, and suppliers include:**

- Proven ability to develop complex and novel projects through all stages: initiation, financial closure, construction, and ongoing maintenance.
- Direct access to quality projects, along with growing projects pipeline.

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<sup>1</sup> The total number of projects as of this date, the scope of projects in commercial operation, construction, and preparation, and the company's goals for connected projects, construction, and preparation in Spain and Italy by the end of 2021, which include data on projects in Spain and Italy that have not been expanded and/or actually purchased.

- Local presence in the markets in which the company operates in Europe.
- Experienced professional and management teams enable the company to effectively realize projects in record time, from planning to financial closing to grid connection.
- Financial resilience and trust of financial institutions in Israel and around the world. Expertise in complex financial closing with Israeli and overseas financing organizations.
- Develop-to-hold business model.
- A pioneer in combining energy and water production.

**We forecast that by 2021 Solaer's projects' (representing 100% holdings) will generate revenues of NIS 28.3 million in 2021, and by 2022, revenues would amount to NIS 123.8 million.**

## Valuation Summary

### Pipeline Valuation

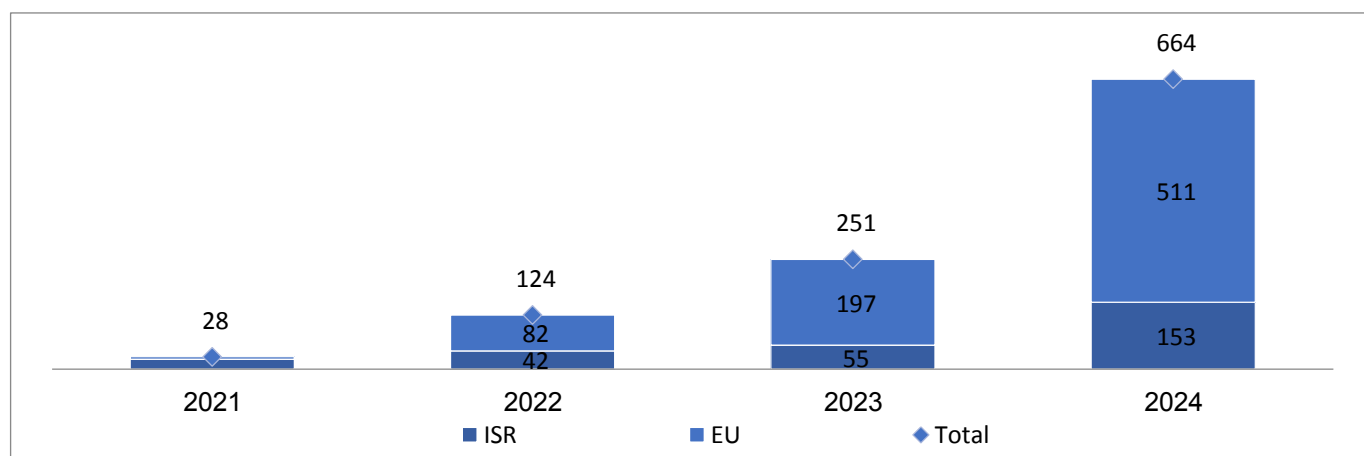
Solaer has disclosed information about 24 clusters of projects, some large-scale and others encompassing numerous standalone projects with medium to low power range, totaling approximately 2,190 MW. These projects are in operations or various stages of development, in three countries (Israel, Italy, and Spain) and in main areas of renewable energy – mostly Solar PV, energy storage, and projects that combine energy and water production. To calculate the company's equity value, we evaluated each project's NPV using the following procedure and parameters:

- Calculated the revenues generated by each project based on:
  - Its electricity production capacity.
  - The number of operating years.
  - Electricity contract price per MW.
  - Hours of electricity production based on similar projects and information received from the company's management.
  - Engineering, procurement, and construction (EPC) fees.
  - Employ PV degradation of the solar panel in an annual decrease of 0.4%.
  - We added additional operating years (five years over the contract period) assuming much lower electricity prices.

- Assigned financing expenses for each project.
- Subtracted operating expenses per project, based on data from the company and our estimations.
- Applied straight depreciation model for each project.
- Added tax rates for each project based on its legal structure.
- Implemented different success rates for the projects based on stages of operation and financial closing.
- Calculated NPV per project, based on the Solaer's percentage of holdings in the project (all cost and revenues were allocated based on % of holdings).
- We add Solaer's WACC of 4.73% (see Appendix 1).

We assume revenues from PV projects will dramatically increase over the coming years as the company will engage in additional large projects, especially in Spain and Italy. For example, we forecast that Solaer revenues in 2021 will be NIS 28.3M (representing 100% of holdings).

**Solaer's Revenue Forecast, 2021-2024, by Geographies (Revenue is in NIS 000s)**



Based on the above parameters, we evaluate the company's pipeline at NIS 943.7 million as we present below:

#	Projects grouped by country	NPV NIS (000)
1	Israel	162,671
2	Italy	450,534
3	Spain	330,523
Total pipeline value		943,728

<sup>1</sup>NPV calculation is based on: a) considering company holdings; b) probability parameters.

## Equity Value

We evaluated Solaer equity value based on 24 clusters of projects within the company's pipeline that the company has identified and disclosed. To the sum of the different projects NPV, we added EPC fees that the company is entitled to receive in any project that completes the financial closing.

On the expenses side, Solaer has general and administrative (G&A) expenses and selling and marketing expenses (mainly due to business development costs for future projects). We consider the baseline G&A expenses as reported in the company financial reports with a 2% annual increase as the company will need to support its progress.

According to the company's financial statement, as of December 31, 2020, the company's share in cash was NIS 27.2 million with unallocated loans and bonds (i.e., unrelated to a specific project) of NIS 249.5 million. According to the company's management, the solo debt at the headquarters level as of writing the report is NIS 72.5 million. In February 2021, Solaer closed its TASE listing, raising NIS 109.8 million in capital. We added these as non-operational assets/liabilities.

Below is our equity value breakdown:

Parameter	NIS (000)
<b>Total Pipeline (NPV + EPC)</b>	943,728
<b>G&amp;A expenses</b>	(100,657)
<b>EV</b>	843,378
<b><u>Non-operating assets/liabilities</u></b>	
<b>Cash + Capital raised through IPO</b>	137,040
<b>Loans</b>	(72,500)
<b>Total non operating</b>	64,540
<b>Equity Value</b>	907,621

**Based on the above parameters, we evaluate the company's equity value at NIS 907.6 million. This valuation encompasses an identified project totaling 2,190 MW.**

## Sensitivity Analysis

The table below presents Solaer's share price target concerning the capitalization rate. We set a range of 0.5% change from our WACC model (see Appendix B). The company has 12.47 million shares as of May 26, 2021.

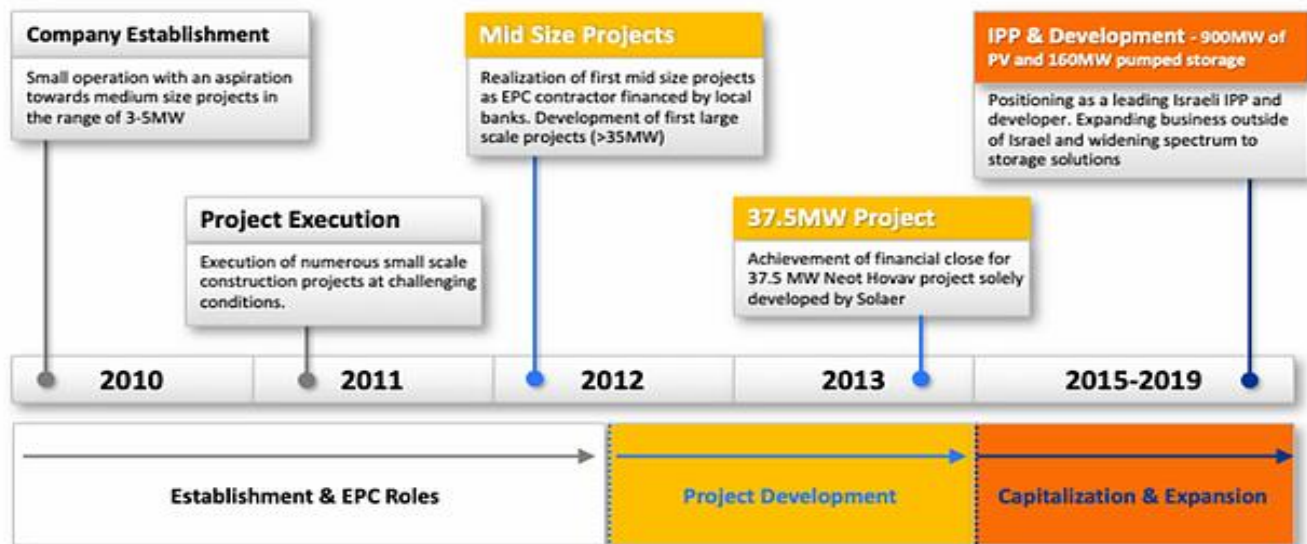
Cap rate	Price target
4.23%	77.9
4.73%	72.8
5.23%	68.1

**We estimate the price target to be in the range of 68.1 NIS to 77.9 NIS with a mean of NIS 72.8.**

## 1. Company overview

Solaer Renewable Energy (TASE: SOLR) initiates, develops, builds, operates, and maintains renewable energy projects in Israel, and Europe.

Solaer is well respected in its industry, both locally and globally. The company has successful experience across all steps and stages of renewable energy projects, including initiation, development, financing, construction, management, operation, ownership, and sale of assets. It has developed over 120 projects with an operational capacity of 2.2GW<sup>2</sup> under various stages of development, construction, and operation (total accumulated sharer of Solaer is approx. 1.2 GW).



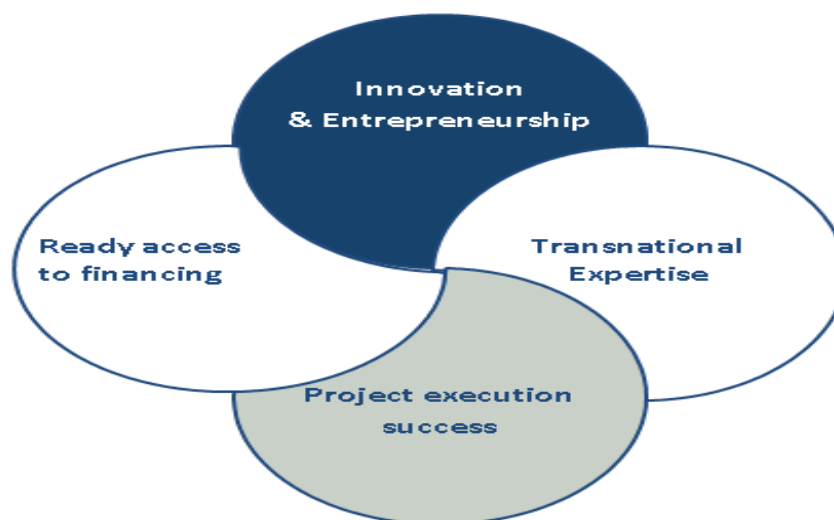
Source: Solaer

With a mission to be a key contributor to independent green energy supply by developing smart production, storage, and distribution solutions, Solaer has teamed up with key market players, and developed a diversified portfolio of assets in key European markets with high credit rating. Solaer is in the process of further expansion in the European continent besides its Israeli operations. Solaer aims to own a portfolio with an operational capacity of 4 GW by 2025.

<sup>2</sup> The total number of projects as of this date, the scope of projects in commercial operation, construction, and preparation, and the company's goals for connected projects, construction, and preparation in Spain and Italy by the end of 2021, which include data on projects in Spain and Italy that have not been expanded and/or actually purchased.



With expertise in initiating, planning, funding, executing, maintaining, and managing renewable projects for over 11 years in Israel and other countries, Solaer focuses on Solar PV technology and Pumped-storage hydroelectricity. Besides, Solaer has been exploring expansion opportunities in Agrophotovoltaics and hybrid projects in Europe.



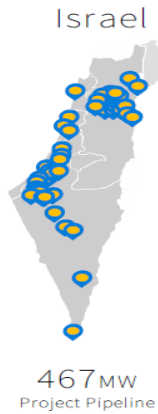
**Figure: Strategic Strengths of Solaer**

Solaer has witnessed international success in executing complex projects in several European countries and its ability to harness local expertise abroad has been key to its success.

### Projects Pipeline\*

Project Stage	Capacity (Based on 100% Share)
Connected, Under construction, Pre-construction	218 MW
Advanced Development	319 MW
Early Development	1,678 MW
Total	2,215 MW

\*Including projects that weren't disclosed at the company's financial statement as of 31, December 2020.



## ISRAEL ACTIVITY

Solaer started its operations in Israel as a contractor for small-sized projects. It has since grown multifold, developing large-scale projects, and achieving several ‘firsts’ in the Israeli renewable industry. It has developed the largest rooftop PV project in Israel, and the biggest net-metering project in Israel in Ayit.

## PROJECT AYIT

Solaer’s project Ayit is the most prestigious in its portfolio, which has secured Solaer a prominent place in Israel’s renewables map. It is a 250 MW Solar PV and pumped-storage hydroelectricity project aiming to serve the Arava / Eilat-Eilat region, turning it into an independent micro-grid. The project is estimated to cost approx. EUR 200 million, and the commercial operation is expected to begin in June 2023.



### LIST OF SOLAER’S PROJECTS IN ISRAEL

37.5 MW large scale project financed by Deutsche Bank

Renewable Energy supply to 75 Schools in Israel

3 MW Dimona PV & Construction project

45000 Sqm largest Rooftop PV project (EUR 8 million)

5 MW PV rooftop project (EUR 9 million)

Biggest Net metering project in Israel (EUR 3 million)

## EUROPE ACTIVITY

Solaer has actively participated in PV development projects in Spain and Italy, besides trying for entry and expansion into other markets like Poland and Bulgaria. In November 2020, Solaer achieved financial close for their 50MW Alizarsun PV Project in Zaragoza, Spain.

## TERMS OF FIXED PRICE ‘PAY-AS-YOU-PRODUCE’ PPA

## Alizarsun PV – Key Data

Peak Power	49,38
Location	Zaragoza, Spain
Irradiation	1980 kWh/kWp
Land Size	264 ha
Lease Agreement	25+10 yrs
Structures	Soltigua, single-axis tracking
Modules	Seraphim, 410Wp, Mono PERC Half cell
Inverters	Sungrow, 3125kW <sub>AC</sub> , central

Source: Solaer

## Spain



756MW

Project Pipeline

Source: Solaer

Solaer's activities are primarily concentrated in Southern Italy, and its involvement in the development of a 100MW project bodes well for future market expansion. Solaer is also actively participating in tendering process in Bulgaria and Poland in trying to expand its presence in Europe. Italy and Spain in particular offer major opportunities in Agropholtaics.

## Italy



952MW

Project Pipeline

## 2. Technology overview

Solaer, with over a decade of experience in Solar PV and pumped storage projects, is in a prime position to contribute to Israel's renewables goals.

### **SOLAR PV + PUMPED STORAGE**

Combining Solar PV with Pumped storage ensures grid stability. Pumped storage hydroelectric projects have been providing additional support since the 1920s, primarily due to their ability to instantly respond to large changes to electrical loads.

Energy Storage in this system is in the form of water. Pumped storage hydropower (PSH) currently accounts for 94 percent of installed global energy storage capacity and nearly 96 percent of the energy stored in grid-scale applications. Traditionally, conventional energy sources during low-demand periods are used to pump water to the upper reservoir. Energy is stored in the form of water which is then run through turbines during heavy demand periods to generate renewable energy to support the grid. Pumped storage is a cost-effective storage technology when combined with other renewable sources like wind and solar PV to minimize the impact of variability in output on the grid.

### **AGROPHOTOVOLTAICS**

Solaer is well set to capitalize on opportunities in Agrophotovoltaics.

Increased demand for power generation due to population growth across the globe has resulted in land-use competition. Traditional PV systems require land management and associated acquisition costs, which has led to an innovative solution that enables dual land-use systems to combine the production of food and energy using agro photovoltaic (APV) systems. APV, or 'dual-use' farming, uses arrays of elevated solar panels over crops to maximize land use and productivity. One of the top two APV research institutes, Fraunhofer Institute, estimates that farming productivity increase with the use of APV by over 160.0%. According to other research studies, APVs improve land productivity by up to 70%, and in arid climates, they improve water usage efficiency by providing additional shading leading to higher crop yields. According to one of the leading institutes in this space, a wide range of crops, including potato, grapes, fruits, spinach, ginseng, beans and legumes, onions, cucumber, and zucchini, are suitable for APV installations.

### **ENERGY + WATER**

Solaer is in the feasibility phase for several projects incorporating water production into energy generation. Solar power can be harnessed to power mini drinking water supply systems and desalination plants. Combining PV plants with water supply optimizes the use of resources.

## **ENERGY MANAGEMENT**

Solaer focuses on maximizing efficiency through smart energy management, novel engineering, and technological solutions in its PV and Storage projects and other renewable projects.

Below, we will introduce the global renewables market and provide a comprehensive overview of the Solar PV and the pumped storage hydropower market. We will also highlight opportunities that we deem to be ripe for Solaer, and provide market overviews of key geographic regions where Solaer has established its presence. Israeli renewables ecosystem will be outlined giving the readers a solid understanding of Solaer's landscape.




### 3. Markets overview

#### Global renewables market

Climate change is one of the greatest concerns for governments worldwide, and achieving de-carbonization in the power sector is key to tackling the issue. While hydropower has been a major source of energy generation for decades, solar and wind energy have been gaining momentum, and the Paris agreement has propelled the growth further. Investment in renewable energy globally hit a high of \$350 billion in 2020, with solar PV and wind power accounting for \$290 billion of the total. A decade of high investment is forecast as the business case for renewables becomes ever stronger.

#### Renewable Energy Market – Market Drivers & Restraints

Drivers	1–2 Years	3–4 Years	5–9 Years
Growing concern for tackling global climate change			
Declining solar and wind generation costs and project costs accelerate new deployments			
Declining battery Energy Storage Systems (ESS) costs			
Increased traction for hybrids in Variable Renewable Energy (VRE) offers horizontal integration and capability building opportunities.			
Need to replace aging power plants			
Increasing digitization across the renewable energy market			

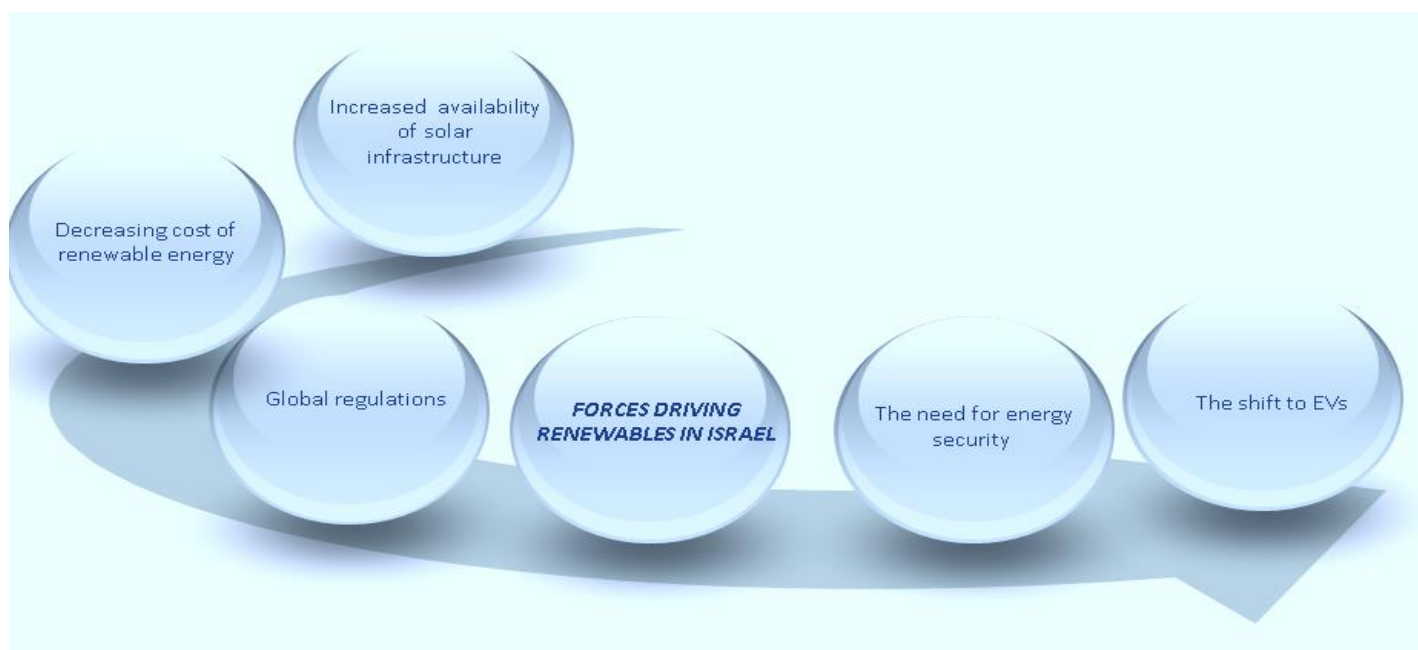
Impact Ratings:  = High,  =Medium,  = Low

Restraints	1–2 Years	3–4 Years	5–9 Years
Need to tackle grid integration issues			
Withdrawal of government subsidies and support could lower growth rates			
Increase in competitive intensity			

## ISRAEL RENEWABLES MARKET – OVERVIEW AND OUTLOOK

The reduction of carbon emissions and promoting renewable sources has been one of the primary goals of Israel's Ministry of Energy, in tandem with global goals, and the official target of renewable sources of energy by 2030 was increased to 30.0% from 17.0% in 2020. The target increment is combined with a commitment to phase out the use of coal for power generation by 2030. This measure is expected to decrease air pollution from the power sector by 93.0% and Green House Gas (GHG) emissions by 50.0%, according to Israel's Energy Minister, helping Israel adhere to its Paris Agreement commitments.

At an outlay of NIS 80 billion (\$22 Billion), this plan aims to use solar installations to meet 80.0% of peak energy demand in Israel, with the forecast of 15GW of solar added in the next decade.

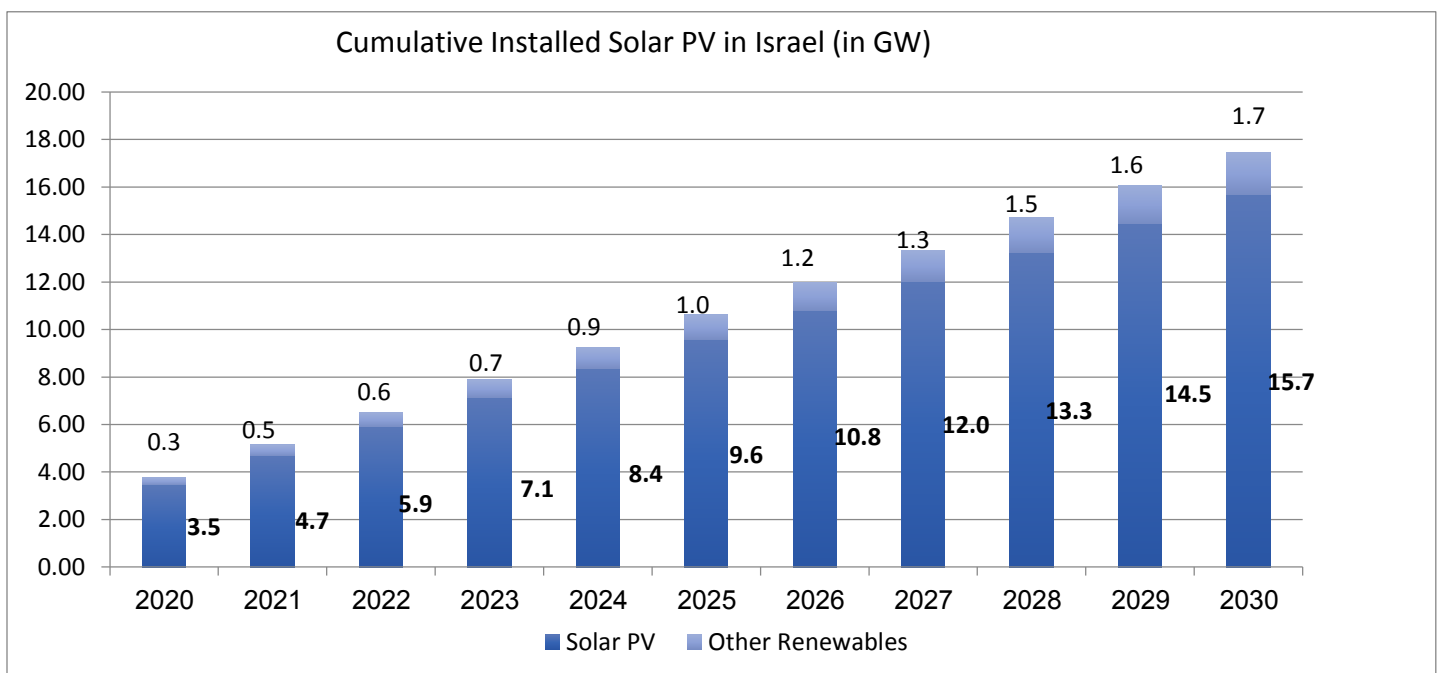


As of 2021, Israel is self-sufficient in terms of energy production. Nevertheless, the current 3%-4% increase in the size of the installed power base is expected to be insufficient given the expected population growth from 9 million in 2019 to 13 million in 2030. The current installed capacity of 17.7GW (2019) will have to grow by 3.2x to 58.1 GW by 2030 to meet the growing demand and to meet renewable energy targets.

Israel is committed to achieving its target of 30.0% of electricity production from renewable sources. Solar power is expected to contribute 90.0% and wind, biomass, and hydropower are expected to collectively contribute to the rest of the target.

To support the transition to realize the 2030 vision, the government is putting major systems and regulations in place:

- Massive development of the electricity grid for the integration of solar energy.
- Promoting significant investment in R&D to upgrade energy storage.
- Implementing tools for developing a stable electrical system capable of handling sharp changes in production scale.
- Obligating any public building with an area exceeding 750 square meters to establish a solar system on at least half of the roof area.
- Establishment of a fund for the construction of renewable energy sources for buildings owned by subsidized entities.
- Joint venture with the Israeli Lottery to build 1200 PV systems on public roof tops.
- Providing exemptions from having to obtain non-ionizing radiation permits for small rooftop PV facilities.
- Removing land allocation barriers and promoting land use for the establishment of renewable energy facilities.
- Establishing charging stations for electric vehicles. The ministry of energy targets one-quarter of the cars sold in 2025 to be electric cars. Consequently, the number of public and private charging stations required to cater to this demand will be 13,000 and 150,000, respectively.



**Figure: Forecast of Israel's Cumulative Installed Solar PV (GW) 2020-2030**

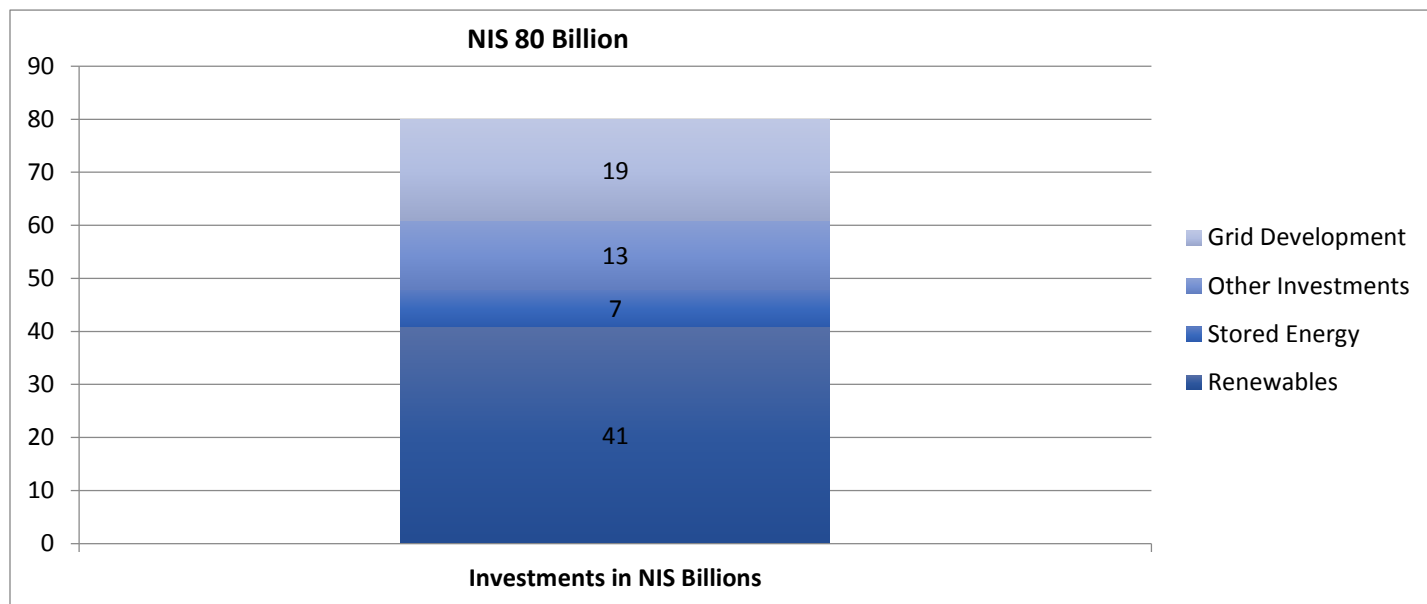
Source: Frost & Sullivan Analysis



This proposed increase to meet renewables target by 2030 presents vast opportunities for

- Players in PV and wind technology equipment
- Transmission equipment suppliers
- IPPs to build and operate renewable energy plants.

Further, to enhance grid reliability, a total storage of 6.5 GW is estimated to be installed by 2030<sup>3</sup>.



**Figure: Proposed Investments in Electricity Infrastructure (in NIS Millions) 2020-2030**

Source: Frost & Sullivan

Yield can be maximized by installing floating PV on pumped storage facilities. Israel's first floating solar PV with a capacity of 480 KW began operating in 2020. Floating solar arrays were installed on a reservoir near the Mishmar HaEmek kibbutz. Further floating PV and agro-photovoltaics retrofitting opportunities can be explored in the country.

Contracts for solar PV and storage capacity of 609 MW were awarded to seven bidders across 33 projects which are expected to deliver power to the Israeli grid by July 2023.

## European Solar PV Market

EU adopted the Renewable Energy Directive (RED II) in December 2018 to achieve a collective, binding target of 32.0% renewable energy by 2030. There is now a proposal to increase to 38.0%-40.0%. These EU-level

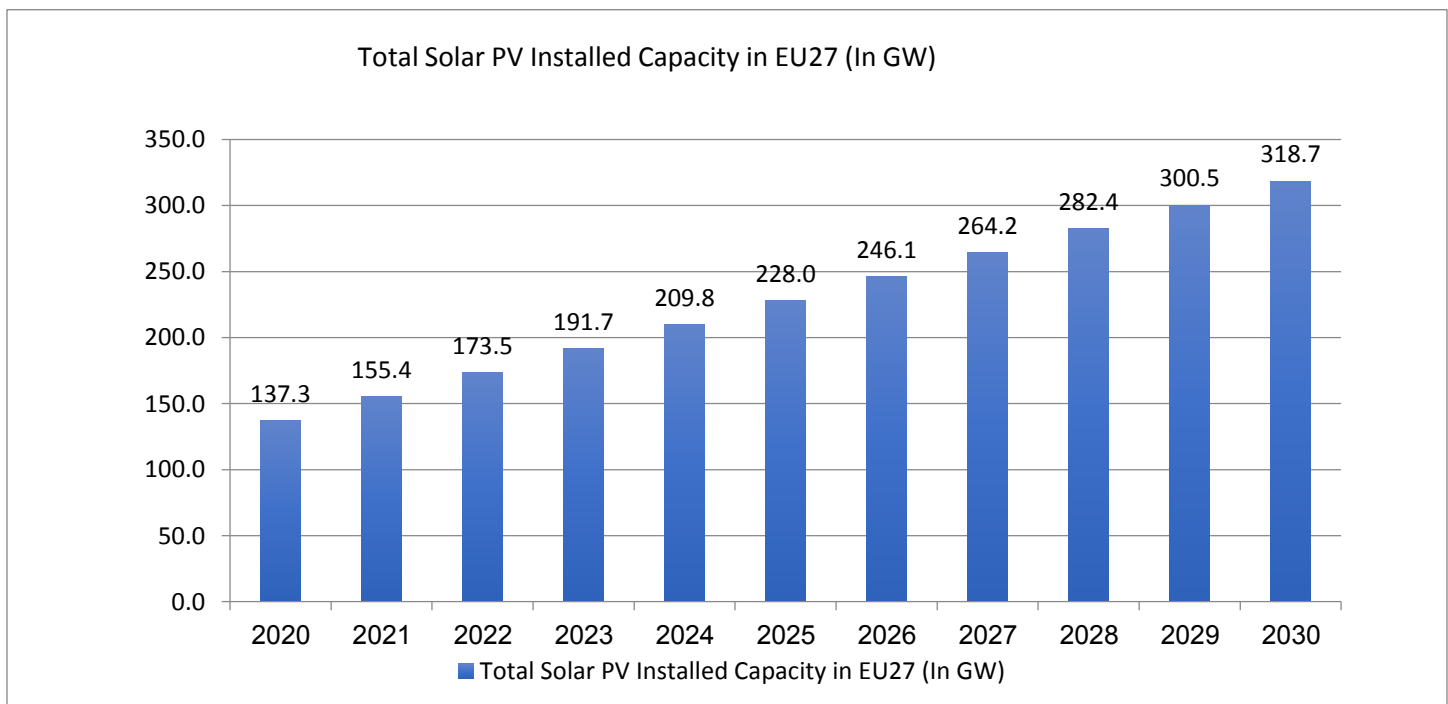
<sup>3</sup> [https://www.gov.il/BlobFolder/rfp/shim\\_2030yaad/he/Files/Shimuah\\_yaad\\_2030n\\_work\\_n.pdf](https://www.gov.il/BlobFolder/rfp/shim_2030yaad/he/Files/Shimuah_yaad_2030n_work_n.pdf)

targets, declining project costs, and national targets are all driving investment growth. Solar PV capacity witnessed 11% growth Y-o-Y during the pandemic in the region, with 18.2 GW installed. An average annual addition of 18.5 GW in the EU is projected by Frost & Sullivan based on the National Energy and Climate Plans (NECPs) for the next decade to meet 2030 EU targets.

Besides declining project costs, further policy support has ensured the dominance of Solar PV among renewables. The NEXT Generation EU's economic recovery plan has earmarked up to 37.0%(~ EUR27-30 billion) of funding for investment related to climate change.

The EU's Regional Development and Cohesion Policy outlines five areas of investment priorities of which cleaner Europe, and greener Europe are the top two objectives. These two objectives are expected to account for 65.0%-85% of the European Regional Development Fund ERDF, and Cohesion Fund between 2021 and 2027. A further 6.0% is dedicated to sustainable urban development fuelling the market for renewables.

Given that 90.0% of Europe's rooftop space is unused, solar PV's potential to contribute to the renewable targets is considerably higher than other technologies.



**Figure: Forecast of Total Solar PV Installed Capacity in EU-27 (in GW) 2020-2030**

Source: Frost & Sullivan

Top 10 Countries	2020 Total Capacity	2030 NECP Target	F&S Estimates by 2030	Estimated Annual Capacity Addition
Germany	54.6	98.0	93.1	3.9
France	10.9	40.0	40.0	2.9
<b>Italy</b>	<b>21.3</b>	<b>51.0</b>	<b>48.5</b>	<b>2.7</b>
<b>Spain</b>	<b>13.3</b>	<b>39.1</b>	<b>35.2</b>	<b>2.2</b>
Netherlands	9.2	27.0	27.0	1.8
Portugal	1.4	9.0	9.0	0.8
Austria	2.0	9.7	8.7	0.7
Denmark	1.7	7.8	7.8	0.6
Belgium	5.4	8.0	7.6	0.2
Greece	3.4	7.6	6.8	0.3

UK	13.9	40	36	2.2
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**Table: Top 10 Countries in terms of annual solar PV capacity addition in EU-27& UK (in GW) 2020-2030** Source: Frost & Sullivan analysis

Lower project costs primarily drive the growth of PV in the European Market, corporate PPAs, high electricity costs – which is a key part of the commercial and industrial (C&I) use case, net metering, and the need to replace aging coal-fired capacity.

The UK's legally binding net zero target for 2050 will require significant policy support. According to the Solar Trade Association of the UK, while the UK has demonstrated abilities to deploy up to 4 GW per annum, there are significant difficulties to contend with both from a regulatory and operational perspective. Frost & Sullivan's conservative estimate is at 2.2 GW per annum – still a considerable increase.

### Policy Support For Solar PV Adoption

- The EU proposes introducing the 'Fit for 55' package in June 2021, wherein GHG emission reduction targets are proposed to increase to 55.0% from 40.0%. It further aims to simplify administrative procedures for utility-scale PV by introducing universal guidelines for the region and scrapping construction permits for rooftop PV installations. Incentivizing C&I PV installations is also on the agenda.
- The proposed revision of the Emission Trading Scheme (ETS) to maintain stringency and hold carbon prices at higher levels would further improve the business case for renewables.

- The rapid growth in decentralized solar energy generation has tested grid capacities in pockets of accelerated growth in the region (grid's inability to handle additional capacities- for instance, surplus sent to the grid). Tackling this is one element of a EUR 59 billion annual grid modernization package, including a focus on digitalization and cybersecurity.
- The proposed 'renovation wave' scheme aims at renovating 35 million buildings to reduce emissions by 60% by 2030. Minimum renewable energy requirements for buildings are expected to be a part of the revised RED. Pilot Building Integrated PV projects to promote sustainable design are expected to be launched as a part of the New European Bauhaus Scheme.
- The sustainability and circularity of solar energy generation systems are being reviewed and encourage Eco design and recycling to ensure solar is entirely sustainable, creating a market for sustainable PV design.

## SPAIN

Growth in corporate PPAs drove the solar PV market in Spain in 2020. Solar PV's share in total electricity demand peaked at 13.2% in May 2020. Like the other member states of the EU, Spain released its Integrated National Energy and Climate Action Plan in 2020. The plan is focused on achieving decarbonization, energy efficiency, energy security, and promoting innovation and competitiveness in the market.

Along with other member states, Spain aims to become carbon neutral by 2050 and aims to increase the share of renewables by 42% in energy end-use by 2030 and increase energy efficiency by 39.5%. The plan foresees solar PV installed capacity of 39GW by 2030, contributing 25.7% of the renewables mix. It has also set a new target for storage development at 6GW with 2.5GW in battery storage.

The key identified challenge in the renewables space has been the lack of access to land for PV developers. It is being addressed by Royal Decree-Law 23/2020, although a clearer framework is expected.

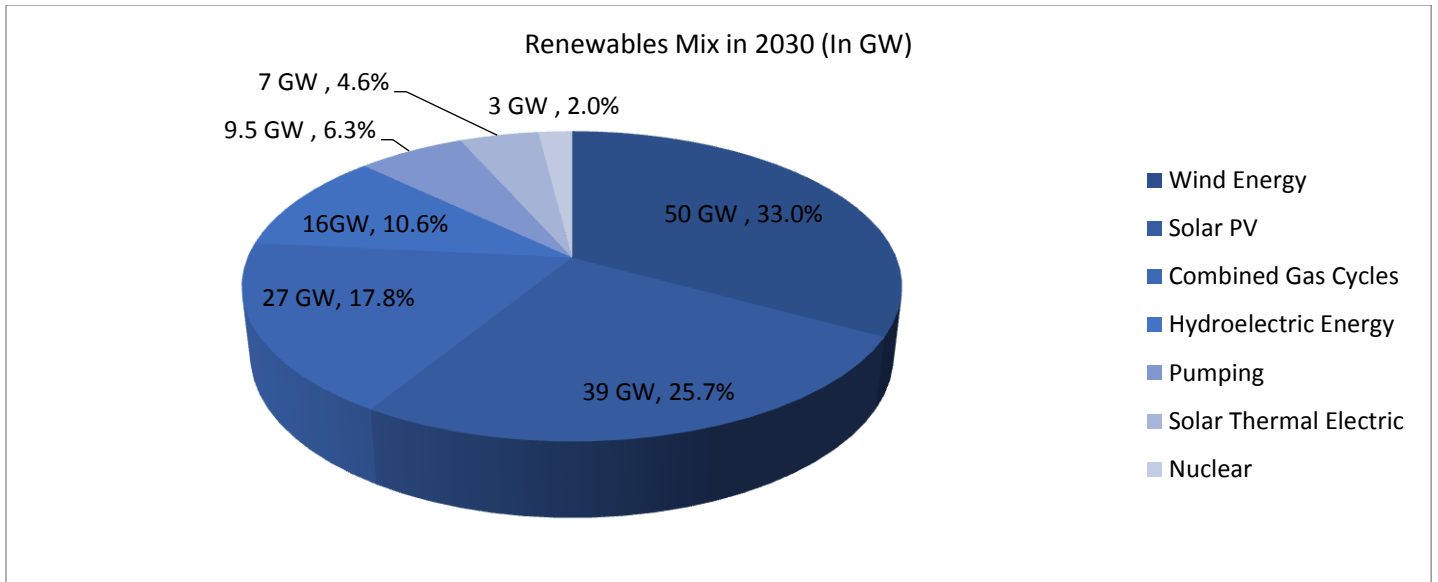


Figure: Renewables Mix expected in 2030 in Spain (in GW) 2030

Source: NECP

While Spain's baseline scenario pegs its solar PV installation achievements at 48.0% of its target of 39.1 GW, Frost & Sullivan estimates a conservative annual capacity addition of 2.2 GW.

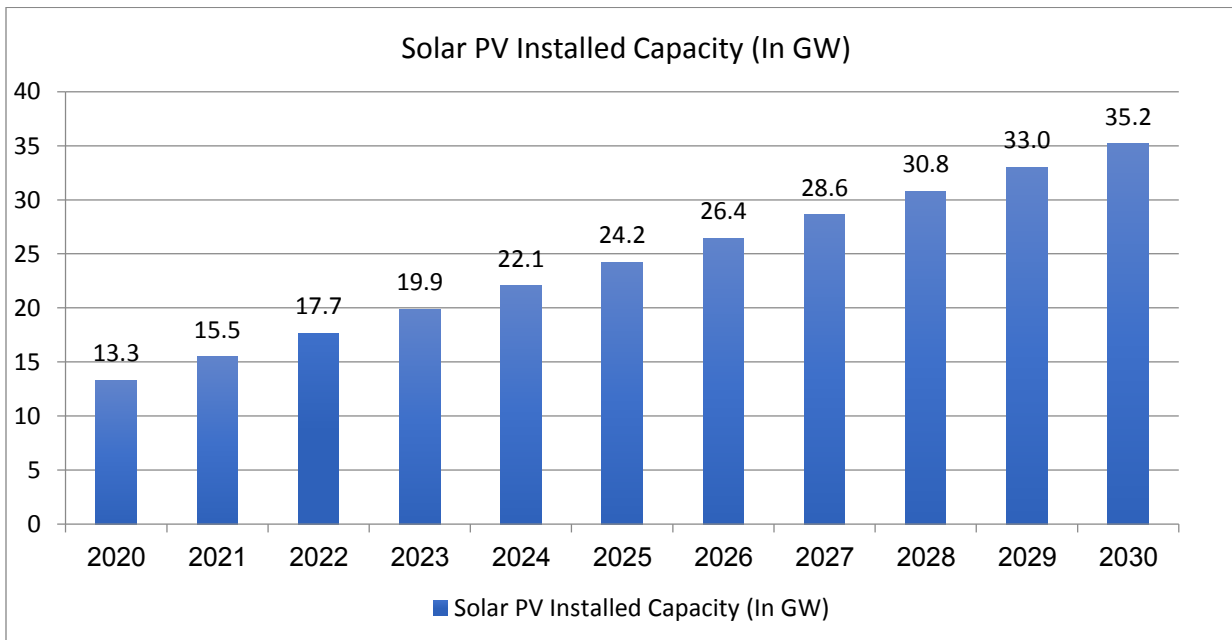


Figure: Forecast of Total Solar PV Installed Capacity in Spain (in GW) 2020-2030

Source: Frost & Sullivan analysis

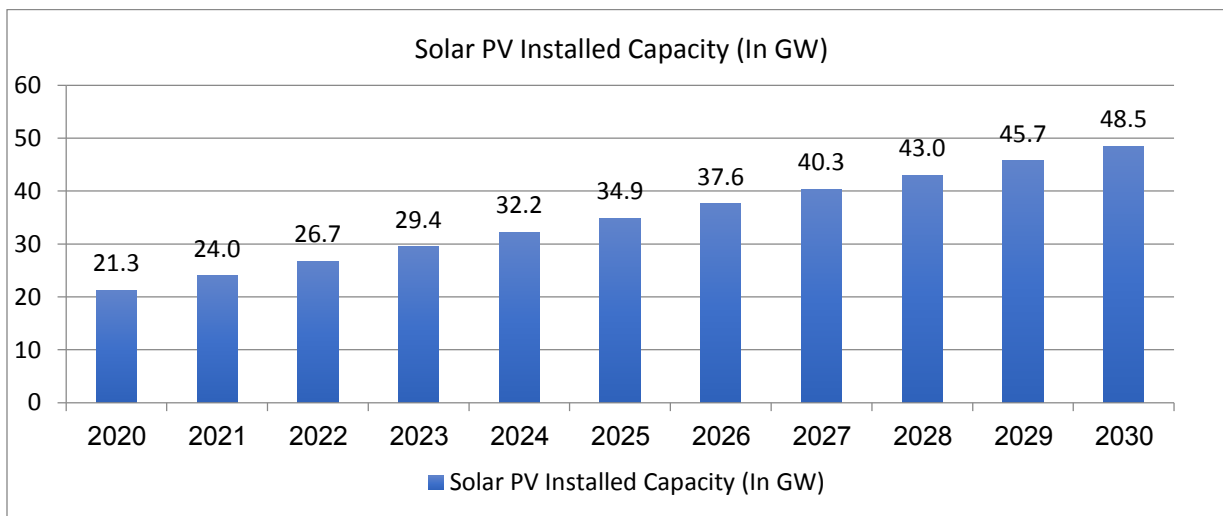
## ITALY

Italy aims to harness 55.0% of its total electricity demand from solar energy by 2030. Solar power is gaining share as a percentage of total renewable installed capacity in a market that had been dominated by hydropower in the past. With its current solar PV installed capacity of 21.3 GW, an added capacity of 31 GW is expected over the next decade with annual capacity addition of at least 2.7 GW. Italy is one of the two largest solar power markets in Europe.

The growth is being primarily fuelled by PPAs and the accelerating demand for agro-photovoltaics.

Italy's commitment to achieving its target is witnessed in its comprehensive NECP, which details its auctions process, including schedules, volume and design, financing schemes, and prosumer promotion schemes.

The key challenge in the market has been the cumbersome administrative procedures that increase the complexity of projects. This is due to the involvement of local authorities in the permit process. However, The NECP has addressed this issue, and implementation will ease this challenge.



**Figure: Forecast of Total Solar PV Installed Capacity in Italy (in GW) 2020-2030**

Source: Frost & Sullivan analysis

Key regions within Italy are Apulia, Sardinia, Lombardy, Veneto, and Emilia-Romagna. 35.0% of capacity additions were through projects of 1MW or higher.

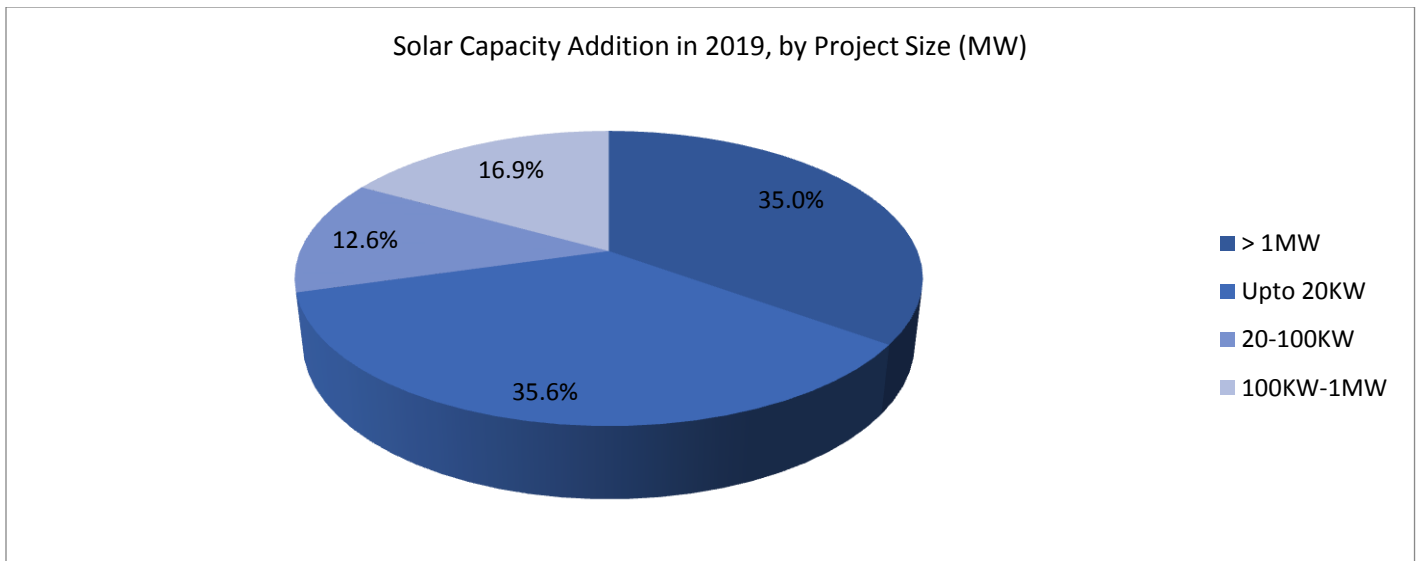


Figure: Solar PV Capacity Addition Breakdown in Italy, 2019

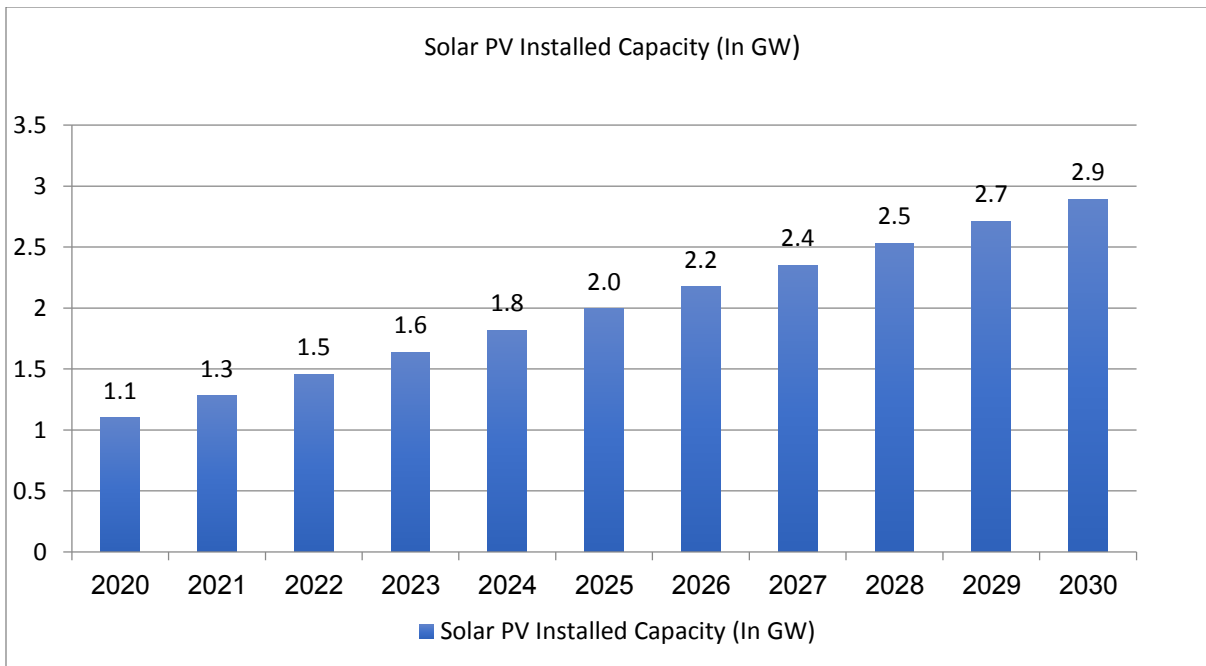
Source: NECP

## BULGARIA

High irradiation, an abundance of non-arable land, affordable land pricing, coupled with supportive policies, have contributed to Bulgaria's growing presence in Europe's solar PV market. Its recent regulatory amendments for the commercial and industrial (C&I) sector and re-introduction of feed-in-tariffs are expected to revive the solar market after years of limited growth.

It is believed that Bulgaria's target of 3.2 GW in solar PV by 2030 doesn't reflect its true solar potential, which is high in southern Bulgaria. At least 200 MW of annual capacity addition is expected to be deployed to achieve Bulgaria's low PV target over the next decade. The country, in general, is tilted towards prosumers and PPAs with no detailed plan for utility-scale PV.

Key hotspots in Bulgaria known for high solar irradiation are Blatets, Stambolovo and Drachevo, and Tsaratsovo.



**Figure: Forecast of Total Solar PV Installed Capacity in Bulgaria (in GW) 2020-2030**

Source: Frost & Sullivan analysis

## POLAND

Poland added more than 1 GW in solar in 2020 and remains one of the high growth markets in Eastern Europe with an installed capacity of 3.6 GW in PV. It aims to meet 23.0% of electricity demand through renewables by 2030, which according to NECP, requires the installation of 7.3 GW in solar PV.

A favorable prosumer scheme that allows prosumers to purchase electricity for free at specified ratios in return for surplus fed into the grid has been a major driver for growth in PV installations.

Tenders with price guarantees, on the other hand, have propelled the growth of larger projects. VAT reduction, preferential loans, loans with lower interest rates, and subsidies are the other drivers.

Poland's low ambition for 2030 despite its high solar potential, low visibility with respect to its auctions, and barriers to PPAs, are the key challenges faced by market participants.



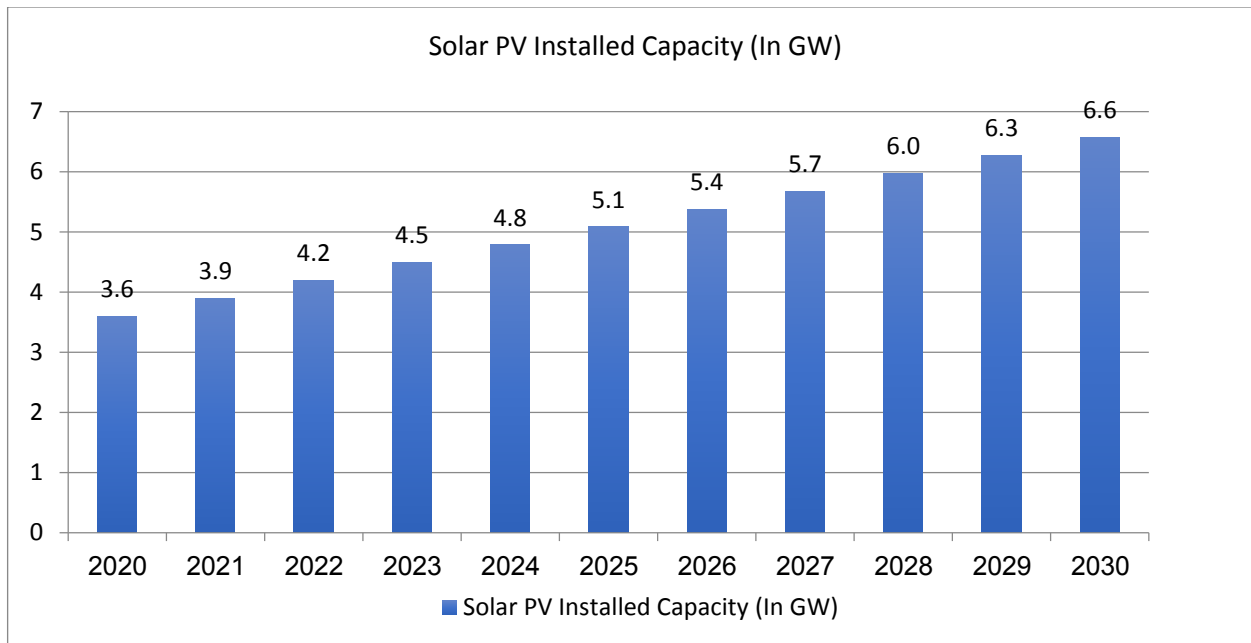


Figure: Forecast of Total Solar PV Installed Capacity in Poland (in GW) 2020-2030

Source: Frost & Sullivan analysis

## OPPORTUNITIES IN PUMPED STORAGE

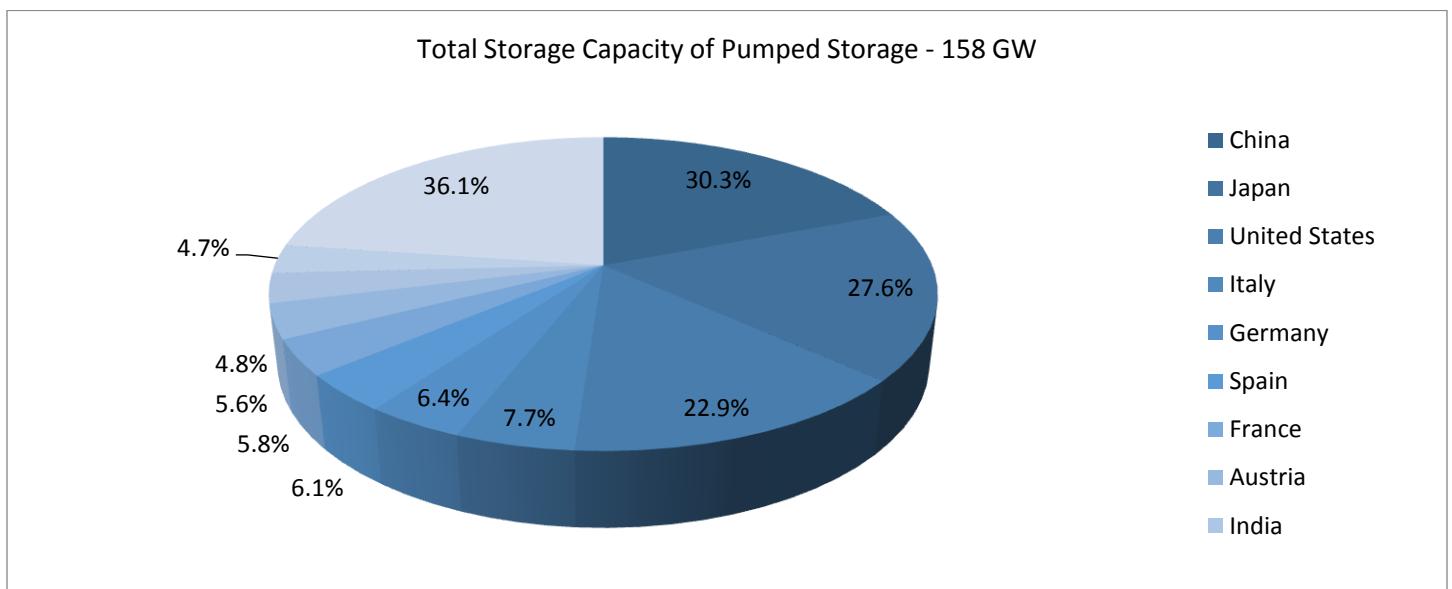
The International Renewable Energy Agency (IRENA) and International Hydropower Association (IHA) have entered into a formal agreement in February 2021 to accelerate the financing and development of **sustainable hydropower**, which will involve initiatives aimed at promoting clean storage and investments between USD 22 billion – USD 55 billion per year up to 2030 which could primarily be achieved by combining VRE with pumped storage hydropower PSH

Countries with abundant wind energy in Europe have planned or have been using wind energy combined with pumped storage onsite to complement VREs to ensure stability. Similarly, there are huge opportunities for combining PV with PSH to ensure grid stability.

Therefore, PSH could primarily be used just as onsite storage for an existing VRE plant or combined with floating PV to optimize the resources harnessed and improve efficiency. For instance, floating PV reduces evaporation losses by shading the water. Retrofitting existing pumped storage systems with floating PV reduces CAPEX and land costs due to their modular nature and the use of the already existing transmission and distribution network.

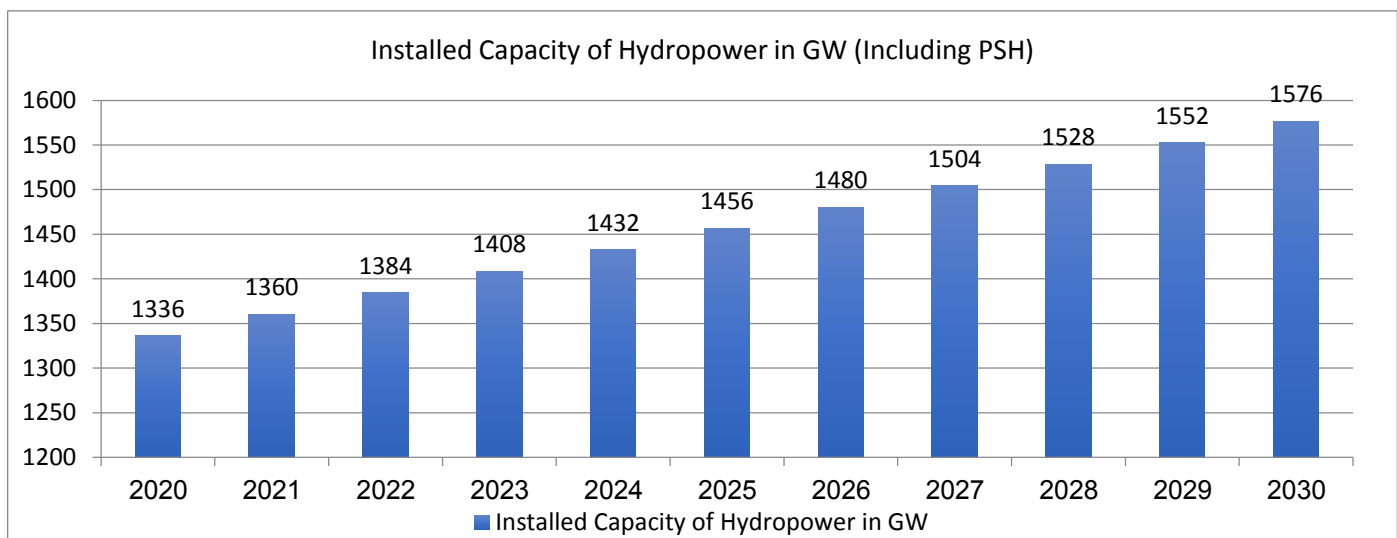
Experts comment that floating panels can increase the capacity factor of a hydropower plant by 50.0% - 100.0%, where the capacity factor is the ratio of actual power generated to the maximum generation capacity of the plant. Besides, floating panels can absorb 7%-14% more energy than land installations due to the cooling effect of water.

Examples of floating PV plants are Alto Rabagão pumped-storage reservoir in Portugal, with an installed capacity of 220 solar kWp, and the 200-kWp floating solar project in Suvereto, Italy. The pilot project in Portugal consists of 840 PV panels, and the estimated annual energy output of 300 MWh was surpassed, with the plant producing 15 MWh more than predicted.



**Figure: Total Global Installed Pumped Storage (in GW) 2019**

Source: Frost & Sullivan analysis



**Figure: Forecast of Installed Capacity of Hydropower, Global (in GW) 2020-2030**

Source: Frost & Sullivan analysis

More than 600,000 sites globally have been identified by Australian Researchers as suitable for sustainable, closed-loop pumped-hydro energy storage projects across the globe. The IHA estimates clean energy storage capacity additions of 78GW by 2030, and Frost & Sullivan estimates the market to register a CAGR of 4.0%.

### PSH Storage Capacity Additions – Projections

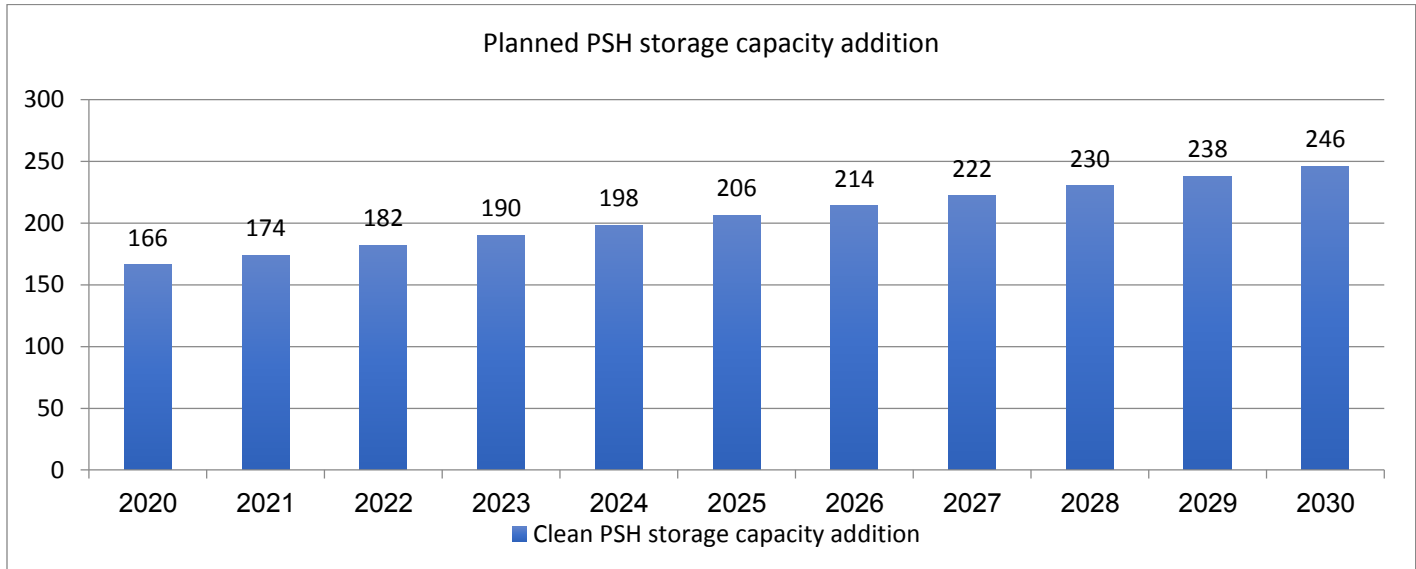


Figure: Forecast of PSH Capacity addition, Global (in GW) 2020-2030

Source: Frost & Sullivan analysis

Clean PSH allows stability through frequency control, voltage regulation, and reserve power, providing a hedge against intermittency of variable renewable energy sources and reducing carbon emissions.

### PLANNED PSH PROJECTS IN EUROPE

Planned/ Announced Projects	Description
Glinsk MAREX	Ireland, 1500 MW
Fin Glen	UK, 600 MW
Mloty	Poland, 750 MW
Siroka Draga	Bosnia and Herzegovina, 1120 MW
Campolattaro	Italy, 572 MW
Tarnita Lapustesti	Romania, 1000 MW
Agios Georgios	Greece, 460 MW
Ataqa Mountain	Egypt 2400 MW
Abdelmouman STEP	Morocco, 350 MW
El Menzel, II STEP	Morocco, 300 MW
Ifahsa STEP	Morocco, 300 MW

Table: Planned PSH Projects, Europe & Middle East, 2020

Source: IHA

The European Commission recently proposed 12 pumped storage projects as cross-border projects of common interest (PCIs). In the United Kingdom, refurbishment of the Ffestiniog pumped storage plant is moving ahead, with further pumped hydro planned in the UK and Ireland. These present opportunities for proposals with floating PV installations. East Asia and the Pacific are other strong regions gaining momentum in floating PV deployment in PSH. **The Ministry of Energy of Israel plans to procure 800 MW of pumped storage, out of which 640 MW are expected to be built in the coming years.**

## AGRO-PHOTOVOLTAICS

A total of 2,200 APV plants are estimated to be under operation worldwide, with a total capacity of 2.8 GWp. Research shows southern Mediterranean region in Europe is the most suited in the region for APV installations.

France, Italy, Spain, and Germany are pioneers in APV installations in Europe. Japan, South Korea, China, France, and Massachusetts (USA) have introduced policies supporting APV implementation.

France was the first country in the EU to introduce an APV financial support scheme in 2017. A total of 45 MWp has been tendered. Sun'Agri has been at the forefront in agrivoltaics in France – the 84 KW test project is located at Polenc in South Eastern France. Total Quadron and InVivo have announced a deal to deploy 500MW of agrivoltaic plants in France by 2025. Vines are the crops most affected by climate change and Italy, France, and Spain has immense potential in agrivoltaics. Similarly implementation of APV systems in sweet pepper crops in the Negev desert in Israel resulted in increased yields and plant heights. Several research projects are ongoing in Southern Europe (Greece, Spain and Italy), to assess the potential of APV in improving yields of various crops, and on animal farming.

Project	Description
BayWa Re, Netherlands	In partnership with its Dutch Subsidiary GroenLeven, a pilot project in Gelderland, Netherlands has been expanded to include 4500 modules with a generating capacity of 1.2 MWp
Enel Green Power, Southern Europe	Enel Green Power has launched a research programme in Greece, Spain, and Italy to identify farming activities that can be carried out alongside large scale PV parks with minimal additional cost outlay.

**Table: Key Projects in Agrophotovoltaics, 2021**

Source: Enel; BayWa Re;

## EUROPE - WIND MARKET OUTLOOK

The cumulative installed capacity of wind energy stood at 220 GW with the addition of 14.7 GW in 2020. 80.0% of the wind installations were onshore. The Netherlands accounted for 13.0% of the new addition in 2020, with 1.5 GW of its 1.98 GW added capacity in offshore wind. Norway (1.5 GW), Germany (1.4 GW), Spain (1.4 GW), and France (1.3 GW) led the installation of onshore wind farms.

The European onshore market is expected to remain stable, with annual installations expected at a level of 12-13 GW until 2030. The annual onshore installations could go up if governments adopt clear and ambitious National and Energy, and Climate Goals and resolve issues related to land and environmental impacts. Spain, Sweden, France, and Norway are currently leading the onshore wind energy growth in Europe. Onshore growth in Germany has slowed down due to unclear government policies and looks uncertain over the next five years. Currently, offshore wind installations are increasing at a higher rate than onshore. Frost & Sullivan expects the increase in offshore installations to continue with an annual average of 6 GW until 2030. The increase is expected to come from countries such as the Netherlands, France, and the UK as governments continue to execute their auctions and tenders. The UK is expected to continue to dominate offshore wind installations until 2030. Between 2020 and 2024, onshore installations are expected to reach 77.6 GW at an average 15.5 GW/Year rate. The European cumulative wind capacity is expected to reach ~414 GW by 2030.

Ranking	Country and Installed Capacity
1	Germany (62.6 GW)
2	Spain (27.2 GW)
3	UK (24.1 GW)
4	France (17.9 GW)
5	Italy (10.8 GW)

**Table: Top 5 European Countries with total Onshore and Offshore Wind cumulative installed Capacity, 2020**

The top 5 countries in terms of wind installations account for 65.1% of total installations in Europe, with UK (10.4 GW) and Germany (7.7 GW) being the hotspots for offshore wind. Poland has about 6.6 GW of onshore wind installed.

Key players in the European wind market include Enercon, Enel, EDF Renewables, Vestas, RWE, Windbud, Windpower Poland, QAir Polska and OX2.

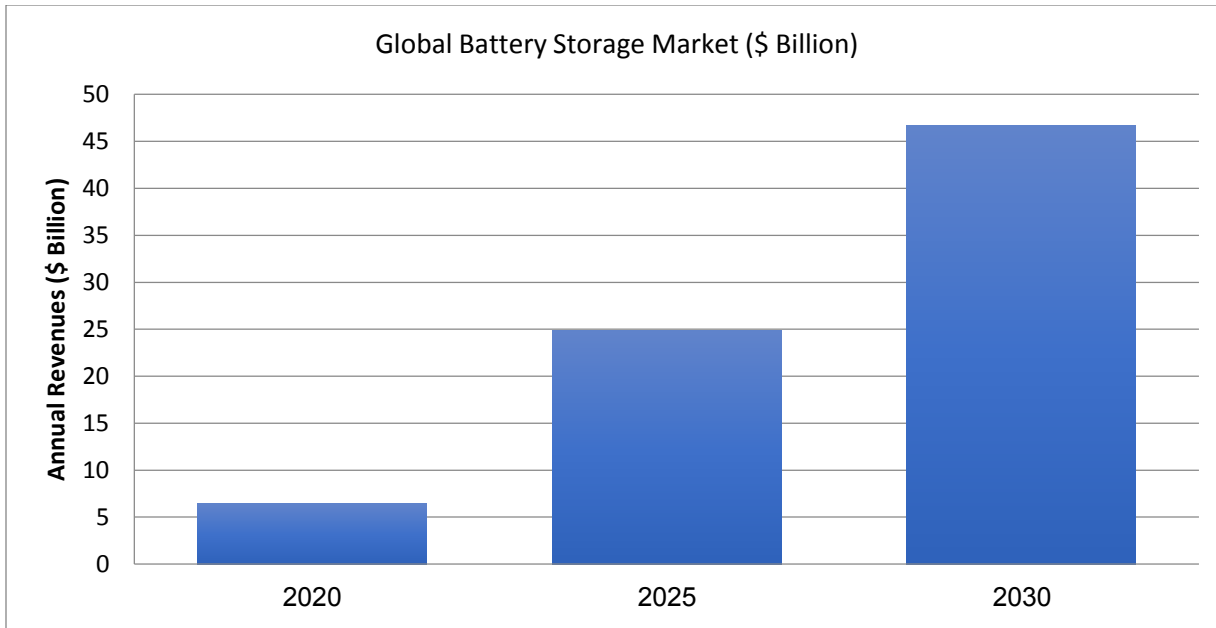
The problem of intermittency in VRE is partially solved in combining solar and wind sources, and large solar-wind hybrid projects have been commissioned across Europe. With careful weather analysis, efficiencies can be achieved using hybrid solar-wind projects supported by storage. Offshore solar-wind hybrid opportunities also exist. For instance, the North Sea is estimated to host around 100 MW of floating PV by 2030, with 1 MW complementary to each offshore wind turbine in the North Sea.

## STORAGE SYSTEMS

One of the key outcomes of a decade of strong renewable investment has been high growth for energy storage solutions. Improved regulatory frameworks, incentive programs, declining projects costs, and revenue opportunities from auxiliary grid services have all contributed to market growth. The majority of investment for grid-based storage solutions has been for battery storage systems, specifically those based on lithium-ion, which have declined by 40% since 2016. These storage systems are either pure-hybrid systems – where a renewable energy source and storage system are combined in the same project – or they are standalone projects connected to the wider grid.

With increasing growth in wind and solar, there is substantial business opportunity for battery storage solutions. Support from national governments and EU institutions should help shore up investor confidence. Pilot projects with battery storage systems are being rolled out in new markets, such as France's 12 MW RINGO project in Vingeanne, which is expected to be commissioned in March 2022 next year. Moreover, Total's 25 MW storage project near Dunkirk is expected to be commissioned by the end of 2021. This signals that projects are underway and that battery storage may well capture market share in the next few years.

The larger European Energy Storage Systems market has witnessed remarkable growth in the last ten years. Projects with a storage capacity of 5.7 GW were announced in 2020 compared to a meager 9MW in 2010. About 1.7 GW is operational.



**Figure: Global Battery Storage Market, 2020, 2025, & 2030**

Source: Frost & Sullivan analysis

## 4. Competitive landscape

There is a whole slew of players involved in the Israeli renewables infrastructure ecosystem. The first category is comprised of B2C players involved in institutional and private home installations such as Solaredge. The second category is comprised of B2B or B2G players with small to medium-sized portfolios such as Solpower, Arava Power Company, El-Mor, Ellomay Capital, and Meshek Energy (that primarily deals with kibbutz cooperatives projects and is a partner to Solaer). The last category is comprised of B2G players that dominate the large governmental projects arena and have significant portfolios. These prominent players include Solaer, Energix (which, like Solaer, has a presence in Europe and the US), and Enlight (which has a strong presence in Europe).

Company	Market cap (29.03.2021)	Total Portfolio Size (% ownership and project development phases vary)
<b>Solaer</b>	472.0 M NIS	2.2 GW
<b>Meshek Energy</b>	436.9 M NIS	173 MW
<b>Solegreen</b>	954.6 M NIS	680 MW
<b>Doral</b>	2.21 B NIS	3.8 GW
<b>Enlight</b>	5.87 B NIS	4.1 GW
<b>Energix</b>	6.36 B NIS	2.5 GW

**Table: Top competitors in Solar and Wind Market in Israel, 2021** Source: Frost & Sullivan

Other key players who were recently awarded projects in Israel are SoleGreen, Ellomay Capital, EDF Energies Nouvelles Israel Ltd, Meshakim & Partners, Invenergy Israel LLC, OPC Energy LLC, Edelcom Ltd, Edeltech Ltd, and Shikun & Binui Energy Ltd

Bidding for projects through partnerships with local real estate developers by International players is common. Several companies incorporated in China have been showing interest in entering the market through consortiums.

### International Players in Israel

- China National Technical Import and Export Corporation (CNTIC) (China)
- Power China Resources (China)
- Solarpack (Spain)



- Cobra Instalaciones Y Servicios (Spain)
- Scatec Solar (Norway)

## COMPETITIVE LANDSCAPE IN EUROPE

Competitive intensity is much higher in Europe in all renewable technologies. For instance, Poland's Energy Authority received more than 1,500 bids for small-scale solar and wind projects. Intelligent design, yield efficiency, and add-on services, combined with cost competitiveness, are the key differentiating factors for market participants.

Key winners of large scale solar and wind contracts in Europe are Engie (France), Juwi (Denmark), EDF Energy Nouvelles (France), Scatec Solar (Norway), Neoen (France), Enerparc (Denmark), X-Elio (Spain), and Abengoa Solar (Spain) apart from local players.

### Active Renewables Developers in Key European Markets having Solaer's presence

SPAIN	ITALY
Iberenova Promociones	Trisol 81
Naturgy	Enel Green Power
Ignis Desarrollo	Eni
Enel Green Power Espana	Solar Power IX
EDP Renováveis	
Solaria	
BULGARIA	POLAND
Enery, Sunenergy Europe GmbH	EDP Renewables Polska
IBC Solar	R Power
Sun Service	Green Genius
Nobesol Bulgaria	Columbus Energy
EVN Naturkraft	V-Ridium
Solar Pro	
Goldbeck Solar GmbH	
Phoenix Solar AG	
First Solar GmbH	
Sharp Energy Solution Europe	

Table: Top competitors in Solar Market in Europe, 2021

## 5. Company Financial Analysis & Valuation

### Valuation method & approach

As part of a discounted cash flow (DCF), the accepted method used in financial valuations, there are several modifications to a company's valuation. In general, there are three primary methods within the DCF method:

1. **Real Options** - valuation method designated for programs/companies where the assessment is binary during the initial phases, and based upon science-regulatory assessment only (binomial model with certain adjustments).
2. **Pipeline assessment** - valuation method used for programs/companies before the market stage. The company's value is the total discounted cash flow, plus allocated costs and assessment of the future technological basis. The assessment of the future technological basis is established based on the company's ability to "produce" new projects and their feed rate potential.
3. **DCF valuation** - similar to companies not operating in the life sciences field, this method applies to companies with products that have a positive cash flow from operations.

Solaer initiates and develops projects which operate and yield revenue in the long-term. It can therefore be viewed as property development and holding company with a pipeline of current and future projects. As such, we evaluate Solaer based on an NPV of its current projects and possible future projects, including a probability factor using the "pipeline assessment".

## Company Financial Overview

Solaers' total revenue for 2020 amounted to NIS 10.3 M, NIS 7 M from initiation, construction and maintenance fees, and NIS 3.3 M from Solaer's grid-connected projects' electricity sales.

As of December 31st 2020, The company has 45.5 MWp installed capacity of PV projects (most of them with high tariffs), 143 MWp of capacity in construction and in preparation for construction, 184MW in advanced development, plus an extra ~1,817MWp of additional projects (in different initiation stages) in the company pipeline.

Solaer's equity as of December 31, 2020, is NIS 57.3 M, 12.4% of its balance. According to its financial report, the company had NIS 27.2 M in cash as of 31 December 2020 and loans totaling NIS 249.5 M. According to the company's management, the solo debt at the headquarters level as of writing the report is NIS 72.5 M. In addition, in February 2021, Solaer closed its TASE listing, raising NIS 109.8 million in capital. The net profit in 2020 was NIS 23.9 M, compared to a loss of NIS 7.3 M in 2019.

## Pipeline Valuation

### Pipeline Overview

Solaer has disclosed information about 24 clusters of projects, some large-scale and others encompassing numerous standalone projects with medium to low power range, totaling approximately 2,190 MW. These projects are in operations or various stages of development, in three countries (Israel, Italy, and Spain) and in main areas of renewable energy – mostly Solar PV, energy storage, and projects that combine energy and water production. Below is the full scope of Solaer's identified and disclosed projects based on information received from the company and based on our analysis:

id	Status	Country	Project name	Type	MWp	Holdings %
1	In commercial operation or towards connection	Israel	Mone Neto Systems 48	PV	5.2	95.8%
2		Israel	Competitive Procedure Systems (39) 47	PV	33.3	87.1%
3		Israel	Ta'arifiyot Systems (39) 51	PV	7.0	96%
4	In construction or in preparation for construction	Israel	Mone Neto Systems 48	PV	0.4	100%
5		Israel	Ta'arifiyot Systems41	PV	8.4	96.7%
6		Israel	Competitive Procedure Systems 18	PV	24.3	93.0%
7		Israel	Self-consumption 1	PV	0.8	100%
8	In advanced development	Israel	Roofs Competitive Procedure Systems 12	PV	9.4	100%
9	In initiation	Israel	Self-consumption System 1	PV	8	100%
10		Israel	Ground Project - Shkiat Energy 1	PV	30	100%
11		Israel	Ground Project - Shkiat Energy 2	PV	90	100%
12		Israel	Gound Project - AYIT	PV	250	80%
13		Israel	Ground Project Naama	PV	15	100%
Total Israel					481.8	88.3%
14	In construction or in preparation for construction	Spain	Alizarsun 1	PV	50	71.3%
15		Italy	Genzano 1+2	PV	40	47.4%
16		Italy	Craco	PV	19	47.4%
17	In advanced development	Spain	Elche 1	PV	50	51%
18		Spain	Mequinenza 1-3	PV	125	47.4%
19	In initiation	Spain	Alizarsun 2	PV	50	43.4%
20		Spain	Elche 2-6	PV	300	51%
21		Spain	Calasparra (3)(1)	PV	30	47.4%
22		Spain	(3)(1)Toledo	PV	133	47.4%
23		Spain	(3)(1)Villena	PV	18	47.4%
24		Italy	Ground Projects (1)(2)(3) 26	PV	893	47.4%
Total EU					1708.0	48.7%
Total overall					2189.8	57.4%

## Methodology & Revenues Forecast

To evaluate each project's NPV, we used the following procedure and parameters:

- Calculated the revenues generated by each project based on:
  - Its electricity production capacity.
  - The number of operating years.
  - Electricity contract price per MW.

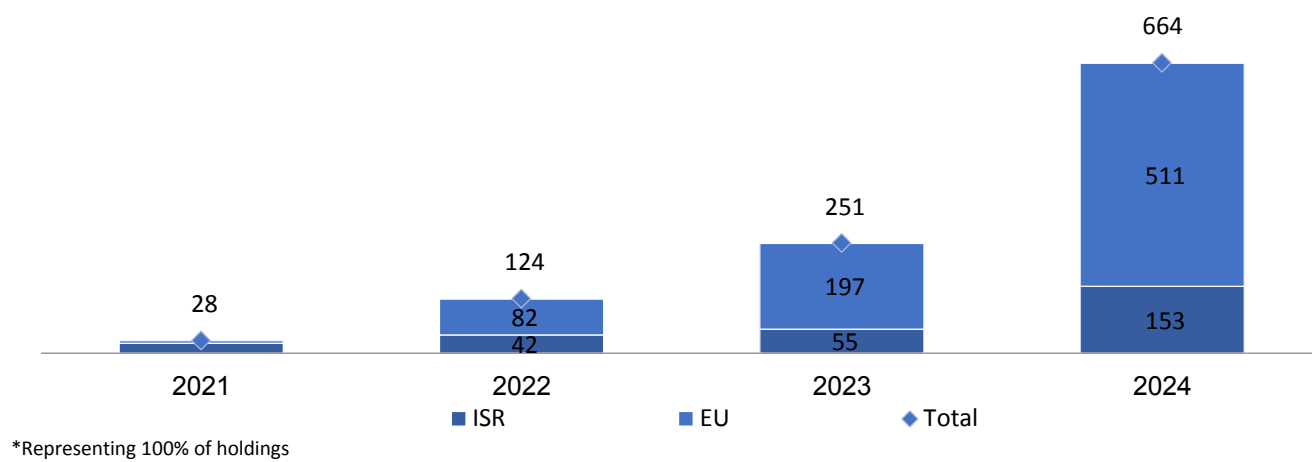
- Hours of electricity production based on similar projects and information received from the company's management.
- Engineering, procurement, and construction (EPC) fees.
- Employ PV degradation of the solar panel in an annual decrease of 0.4%.
- We added additional operating years (five years over the contract period) assuming much lower electricity prices.
- Assigned financing expenses for each project.
- Subtracted operating expenses per project, based on data from the company and our estimations.
- Applied straight depreciation model for each project.
- Added tax rates for each project based on its legal structure.
- Implemented different success rates for the projects based on stages of operation and financial closing.
- Calculated NPV per project, based on the Solaer's % of holdings in the project (all cost and revenues were allocated based on % of holdings).
- We calculated Solaer's WACC to be 4.73% (see Appendix 1).

We estimate revenues from PV projects will dramatically increase over the coming years as the company will engage in additional large projects, especially in Spain and Italy. For example, we forecast that Solaer revenues in 2021 will be NIS 28.3M (representing 100% of holdings).

As of today, all of Solaer's revenues are generated through Israeli facilities. In accordance with the company strategy to expand its operations in Spain, Italy, and Poland, revenues from the EU are expected to surpass revenues from Israel by 2022. The EU will become the dominant revenue-generating market, as we show in the below figure. We assume that by 2024 total revenues will total NIS 664 million, whereas 77% of the revenues are from European projects and the rest from Israeli-based projects.

On the chart below, we display the estimated increase in revenues during the forecast period:

**Solaer's Revenue\* Forecast, 2021-2024, by Geographies (NIS 000s)**



Based on the above parameters, we evaluate the company's pipeline at NIS 943.7 million as we present below:

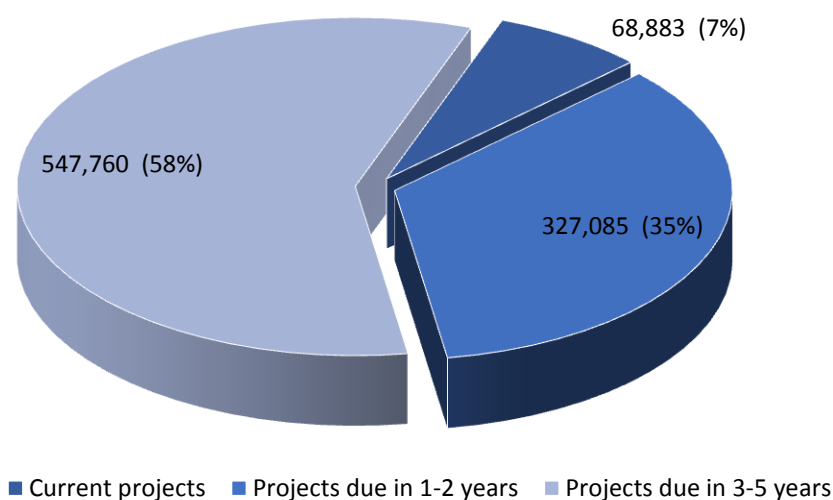
#	Projects grouped by country	NPV NIS (000)
1	Israel	162,671
2	Italy	450,534
3	Spain	330,523
Total pipeline value		943,728

<sup>1</sup>NPV calculation is based on: a) considering company holdings; b) probability parameters.

The pipeline valuation takes into consideration the different stages of each project. Thus, we evaluate Solaer's pipeline while accounting for the different stages for each project and based on the grid connection forecasted year.

According to our analysis, we value projects which are in commercial operation and towards connection at NIS 68.9 M, additional projects that are due within 1-2 years at NIS 327.1 M, and projects that are due in 3-5 years are at NIS 547.7 M, as we show below:

**Solaer's Project Pipeline Valuation (NPV breakdown; NIS 000s)**



## Non-pipeline projects

As mentioned, we identified 24 clusters of projects totaling 2,190 MW that are already operating or will commence operation during 2021 to 2025. However, in our view, the company would continue to develop its

pipeline further and increase it considerably. **We did not consider these projects (for example, Poland) as they are still in the early stage of development. Thus, we assume an upside in our valuation.**

## Equity Value

We evaluated Solaer equity value based on 24 clusters of projects within the company's pipeline that the company has identified and disclosed. To the sum of the different projects NPV, we added EPC fees that the company is entitled to receive in any project that completes the financial closing.

On the expenses side, Solaer has general and administrative (G&A) expenses and selling and marketing expenses (mainly due to business development costs for future projects). We consider the baseline G&A expenses as reported in the company financial reports with a 2% annual increase as the company will need to support its progress.

According to the company's financial statement, as of December 31, 2020, the company's share in cash was NIS 27.2 million with unallocated loans and bonds (i.e., unrelated to a specific project) of NIS 249.5 million. According to the company's management, the solo debt at the headquarters level as of writing the report is NIS 72.5 million. In February 2021, Solaer closed its TASE listing, raising NIS 109.8 million in capital. We added these as non-operational assets/liabilities.

Below is our equity value breakdown:

Parameter	NIS (000)
<b>Total Pipeline (NPV + EPC)</b>	943,728
<b>G&amp;A expenses</b>	(100,657)
<b>EV</b>	843,378
<b><u>Non-operating assets/liabilities</u></b>	
<b>Cash + Capital raised through IPO</b>	137,040
<b>Loans</b>	(72,500)
<b>Total non operating</b>	64,540
<b>Equity Value</b>	907,621

**Based on the above parameters, we evaluate the company's equity value at NIS 907.6 million. This valuation encompasses an identified project totaling 2,190 MW.**



## Sensitivity Analysis

The table below presents Solaer's share price target concerning the capitalization rate. We set a range of 0.5% change from our WACC model (see Appendix B). The company has 12.47 million shares as of May 26, 2021.

Cap rate	Price target
4.23%	77.9
4.73%	72.8
5.23%	68.1

**We estimate the price target to be in the range of 68.1 NIS to 77.9 NIS with a mean of NIS 72.8.**

## Appendix #.1: Capitalization Rate (WACC)

Cost of equity capital ( $k_e$ ) represents the return required by investors. The capitalization rate is calculated using the CAPM (Capital Asset Pricing Model). It is based on a long-term 30-year T-bond with a market risk premium, and based on Professor Aswath Damodaran's (NYU) commonly used sample ([www.damodaran.com](http://www.damodaran.com)). As of January 8, 2021, the Israeli market risk is estimated at 5.4%.

A three-year market regression Beta is 0.67, according to a sample of 25 companies (at various stages), representing the renewable energy sector ([www.damodaran.com](http://www.damodaran.com)). We also add specific risk premiums to the company as a major part of its projects are outside of Israel with different regulatory risks.

Weighted average cost of capital model (WACC) is estimated as follows:

$$WACC = R_d(1-t) * (D/D+E) + K_e(E/D+E) + ArP$$

$$\{K_e = R(f) + \beta_e * (R(m) - R(f))\}$$

The company's financial structure, based on the WACC model, is as follows:

WACC	Parameter	Data	Source
Long-term (30 years) T-bond	$R(f)$	2.35%	$R_f$ - Israeli treasury bonds - 30 years, as of 22/05/2021
Market risk premium	$R(m) - R(f)$	5.4%	Based on Damodaran (January 8, 2021) - Israel
Beta	$\beta_e$	0.67	Beta sample – Green & Renewable Energy (Damodaran, 2021), 25 firms
Cost of Capital	$K_e$	5.96%	
Debt, rate	$R_d$	4.2%	Q4 20 financial data
Debt (%)	$D/(D+E)$	81.73%	Q4 20 financial data
Equity(%)	$E/(D+E)$	18.27%	Q4 20 financial data
Tax	$t$	23.00%	
Additional Risk Premium	$ArP$	1.00%	
WACC= $R_d(1-t) * (D/D+E) + K_e(E/D+E) + ArP$		4.73%	

We therefore estimate the company's WACC to be 4.73%.

## Appendix #.2: About Frost & Sullivan

Frost & Sullivan\* is a leading global consulting, and market & technology research firm that employs staff of 1,800, which includes analysts, experts, and growth strategy consultants at approximately 50 branches across 6 continents, including in Herzliya Pituach, Israel. Frost & Sullivan's equity research utilizes the experience and know-how accumulated over the course of 55 years in medical technologies, life sciences, technology, energy, and other industrial fields, including the publication of tens of thousands of market and technology research reports, economic analyses and valuations. For additional information on Frost & Sullivan's capabilities, visit: [www.frost.com](http://www.frost.com). For access to our reports and further information on our Independent Equity Research program visit: [www.frost.com/equityresearch](http://www.frost.com/equityresearch).

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### What is Independent Equity Research?

Nearly all equity research is nowadays performed by stock brokers, investment banks, and other entities which have a financial interest in the stock being analyzed. On the other hand, Independent Equity Research is a boutique service offered by only a few firms worldwide. The aim of such research is to provide an unbiased opinion on the state of the company and potential forthcoming changes, including in their share price. The analysis does not constitute investment advice, and analysts are prohibited from trading any securities being analyzed. Furthermore, a company like Frost & Sullivan conducting Independent Equity Research services is reimbursed by a third party entity and not the company directly. Compensation is received up front to further secure the independence of the coverage.

### Analysis Program with the Tel Aviv Stock Exchange (TASE)

Frost & Sullivan is delighted to have been selected to participate in the Analysis Program initiated by the Tel Aviv Stock Exchange Analysis (TASE). Within the framework of the program, Frost & Sullivan produces equity research reports on Technology and Biomed (Healthcare) companies that are listed on the TASE, and disseminates them on exchange message boards and through leading business media channels. Key goals of the program are to enhance global awareness of these companies and to enable more informed investment decisions by investors that are interested in "hot" Israeli Hi-Tech and Healthcare companies. The terms of the program are governed by the agreement that we signed with the TASE and the Israel Securities Authority (ISA) regulations.

### For further inquiries, please contact our lead analyst:

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## Appendix #.3: Team biographies

**Dr. Tiran Rothman** is the head of Frost & Sullivan Research & Consulting Ltd., a subsidiary of Frost & Sullivan in Israel. He has over 10 years of experience in research and economic analysis of capital and private markets, obtained through positions at a boutique office for economic valuations, as chief economist at the AMPAL group, and as co-founder and analyst at Bioassociate Biotech Consulting. Dr. Rothman also serves as the Economics & Management School Head at Wizo Academic College (Haifa). Tiran holds a PhD (Economics), MBA (Finance), and was a visiting scholar at Stern Business School, NYU.

**Almog Josef Sokolik** is an Analyst and Consultant at Frost & Sullivan Research & Consulting Ltd., a subsidiary of Frost & Sullivan in Israel. He has experience in valuation of public and private firms, research and market analysis obtained through positions at the Ministry of Finance - Department of the Chief Economist, and Ben-Gurion University - Laboratory for Judgment & Decision Making as research analyst. Almog holds a BA in Economics and Psychology.

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