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EQUITY

Investment Pitch

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# Company Profile



**Overview: Enphase Energy**  
**NasdaqGM: ENPH**

**Current Stock Price: \$220.2**

**Entry Price: \$211**

**Entry Date: 06/03/2023**

**Target Price: \$248**

**Target Date: 06/09/2023**



# Company Profile



# Key Details

- **Enphase Energy, Inc., together with its subsidiaries, designs, develops, manufactures, and sells home energy solutions for the solar photovoltaic industry in the United States and internationally.**
- **The company offers semiconductor-based microinverter, which converts energy at the individual solar module level, and combines with its proprietary networking and software technologies to provide energy monitoring and control services.**
- **It also provides microinverter units and related accessories, an IQ gateway; IQ batteries; the cloud-based Enlighten monitoring service; storage solutions; and electric vehicle charging solutions;**
- **The company sells its solutions to solar distributors; and directly to large installers, original equipment manufacturers, strategic partners, and homeowners, as well as through its legacy product upgrade program or online store.**
- **Enphase has shipped more than 32 million microinverters, and approximately 1.4 million Enphase-based systems have been deployed in more than 130 countries.**
- **Enphase Energy, Inc. was incorporated in 2006 and is headquartered in Fremont, California.**





# Integrated Product Overview

- **The Enphase Energy System with IQ uses a single technology platform for the management of the whole solution, enabling commissioning with the Enphase Installer App; consumption monitoring with Enphase IQ Gateway with IQ Combiner+, Enphase App, a cloud-based energy management platform, and its IQ Battery.**
- **System owners could use the Enphase App to monitor their home's solar generation, energy storage and consumption from various web-enabled devices.**
- **The company offers solutions targeting the residential and commercial markets in the U.S., Canada, Mexico, Europe, Australia, New Zealand, India, Brazil, South Africa, and certain other Central American and Asian markets.**
- **It sells primarily to solar distributors who combine its products with others, including solar modules products and racking systems, and resell to installers in each target region.**
- **In addition to its solar distributors, the company sells directly to select large installers, original equipment manufacturers (OEM) and strategic partners.**
- **Its OEM customers include solar module manufacturers who integrate its microinverters with their solar module products and resell to both distributors and installers.**
- **The company also sells certain products and services to homeowners, primarily in the support of its warranty services and legacy product upgrade programs, via its online store. Strategic partners include various companies, including industrial equipment suppliers and the providers of solar financing solutions.**

# Enphase– Key Financial Data

<b>\$ Millions</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>
<b>Sales</b>	624.3	774.4	1382.0	2330.9
<b>Growth %</b>	97.5	24	78.5	68.7
<b>Net Income</b>	161.1	134	145.4	397.4
<b>Margin %</b>	25.8	17.3	10.5	17
<b>EPS</b>	1.23	0.95	1.02	2.77
<b>P/E</b>	-	-	-	75
<b>P/BV</b>	91.04	26.58	40.69	67.26

# Investment Thesis



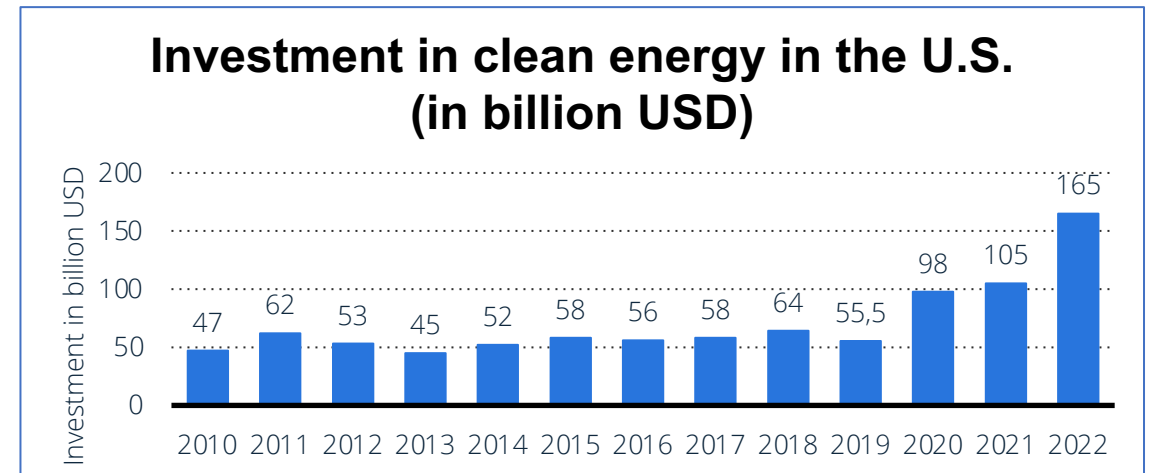
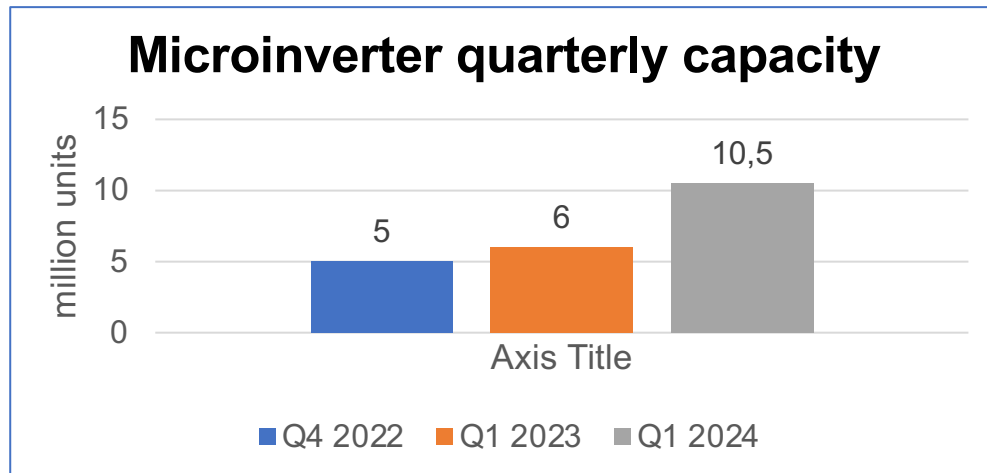


# **Supportive Macroeconomic Environment + Market Penetration**

- **With marquee legislations around Europe, NA and South America offering countless economic incentives for renewable energy asset expansion and operations, ENPH is expected to benefit both on the top line and bottom line**
- **Increased sales growth/stability in Europe with energy reshoring post Russo-Ukrainian war**
- **Increased market penetration in the US with a >70% NPS**

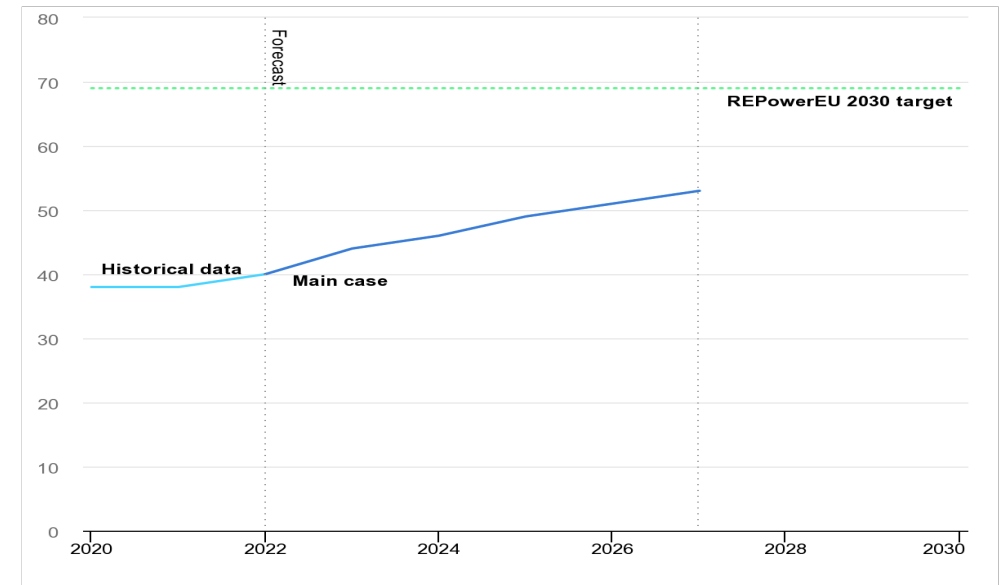
# US Legislation Environment

- Investment Tax Credit (ITC) is extended by the Inflation Reduction Act (IRA). It will provide 30% tax rebate on the total cost of a solar installation.
- IRA implements a separate 30% tax credit for an Energy Storage System's (ESS) total cost which is available for homeowners.
- It is estimated that ENPH will enjoy the 11c/w direct benefit, or at \$25/inverter.
- IRA will invest more than \$60 million in domestic clean energy manufacturing. ENPH could benefit from an annual \$450m manufacturing cost reduction via the IRA, starting in 2024.

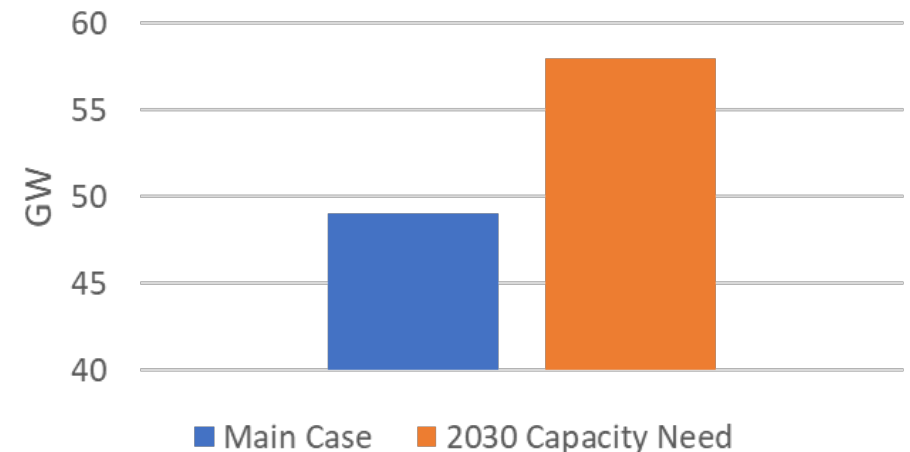


# European Legislation Environment

- **European Investment Bank will invest €30 billion through the RePowerEU program with separate € 34.4 billion for investing in renewable energy.**
- **European Solar PV Industry Alliance was established. It aims to build over 320 GW of solar energy by 2025 and 600 GW by 2030.**
- **30 GW of committed European manufacturing capacity will translate into €60 billions of investments in the solar industry per year.**
- **Currently, EU is undershooting its target.**
- **Green Deal Industrial plan announced in 2023 pledges further € 100 billions on green energy development.**



**Average annual additions for solar PV**

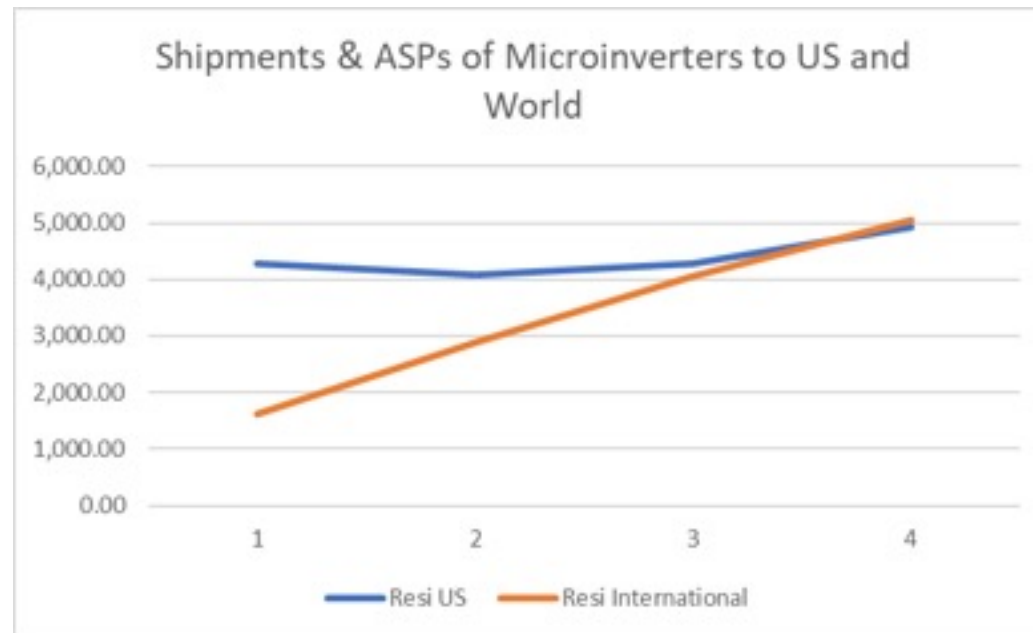


# Firm Development



# Competitive edge

- IQ8 solar microinverters is capable of forming a microgrid during a power outage using only sunlight, providing backup power even without a battery.
- Gross margin of 43.8% and increasing
- Market leader with 48% market share
- Increasing its share of wallet per home from \$2,000 back in 2019 with its solar only offering toward \$12,000 in 2023 in massive Serviceable Available Market (SAM) of \$23 billion by 2025.



# M/A

## Acquisitions



CLOSED ON  
JANUARY 25, 2021

Solargraf<sup>SM</sup> offers a simple platform to accelerate the end-to-end sales process across the residential solar industry.



CLOSED ON  
MARCH 31, 2021

A leading provider of outsourced proposal drawings and permit plan sets for residential solar installers in North America.



CLOSED ON  
DECEMBER 13, 2021

Provides a platform to match cleantech asset owners with a local and on-demand installation and service workforce.



CLOSED ON  
DECEMBER 31, 2021

Offers electric vehicle (EV) charging solutions for residential and commercial customers in the U.S.



CLOSED ON  
MARCH 14, 2022

Provides consistent high-quality leads to solar and storage installers, resulting in lower customer acquisition costs.



CLOSED ON  
JUNE 03, 2022

Provides a range of testing capabilities including EMC testing, product testing, product safety testing, environment testing, and high-power testing.



CLOSED ON  
OCTOBER 10, 2022

Provides Internet of Things (IoT) software solutions to connect and manage a wide range of distributed energy devices within the home.

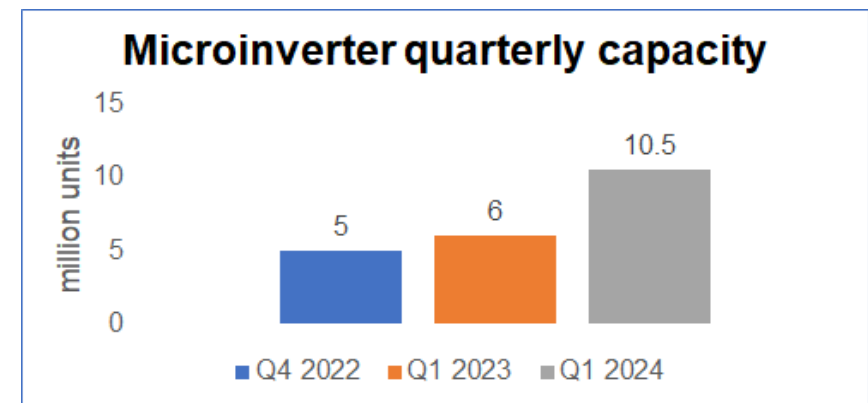
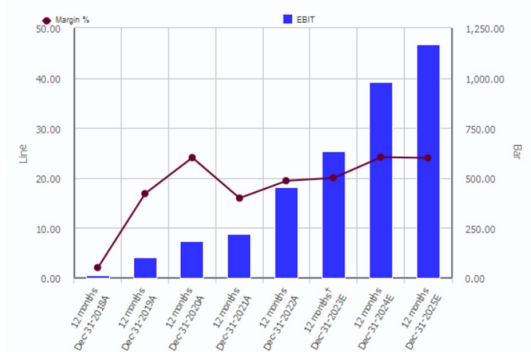


# European/World Growth

- European business is experiencing strong growth with Q4 revenue increasing by 21% sequentially and 130% YoY
- ENPH will introduce IQ8 microinverters and IQ Batteries into other European countries in the near term
- Manufacturing facility in Romania to start in Q1
- Manufacturing now in the US and starting in Romania – production capacity exited 2022 at 5 million – expecting a capacity of 10 million for end of 2023.
- European growth reduces risk associated with NEM 3.0



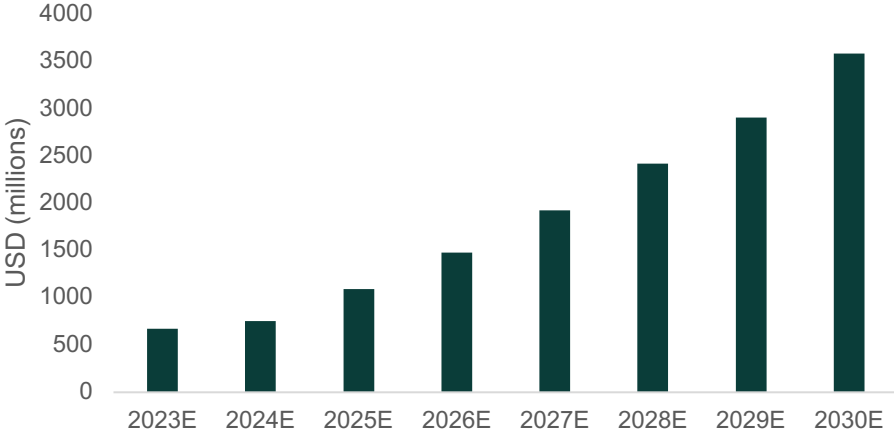
Enphase Energy, Inc. (NasdaqGM:ENPH)



# Key Growth/Financial Insights

- Steady FCF growth till 2030, reaching \$3.5 billion in FCF in 2030
- Expected revenue growth from non-US markets, increasing from USD 273 mn to USD 569 mn in 2023E (>100% growth)
- Reshoring manufacturing in the US, increasing capacity to >10 million inverters, with 70% sales growth in US by 2025

Free Cash Flow - Sell Side Projections till 2030



# Valuation Analysis



# DCF-FCF based

Cash Flow Statement, 2017-2025E (\$ in millions)							1	2	3	4	5	6
	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E
Operating Activities Net Income	-45	-12	161	134	145	397	773	1,088	1,462			
Depreciation	9	10	14	17	32	61	70	81	81			
Deferred income taxes	-1	0	-73	-17	-31	4	0	0	0			
Other	4	5	16	64	76	3	0	0	0			
Working Capital Change	-1	2	1	-24	15	62	-224	-100	-98			
Cash from operations	-28	-16	139	216	352	745	619	1069	1445			
Investing Activities Capex	-4	-4	-15	-21	-52	-46	-60	-68	-48			
Free Cash Flow	-24	-12	154	237	404	791	679	1137	1493	1584	1928	2440
PV (FCF) @ 12%							679.00	898.37	1,048.58	988.88	1,069.90	1,203.58
Sum PV FCF							5,888.32					
Terminal value 1 at 5% growth	18956.37318											
Terminal Value 2 at terminal value multiple of 19 by BOFA with DF of 0.39												18080.4
Total Firm Value							24406.70426					
Net Debt							1310					
Equity Value							23096.70426					
Total shares outstanding							136					
Equity Value per share							177.6669559					

- Our forecasts go up to 2025 based on earnings guidance, solar industry reports and predictable CAPEX patterns for ENPH
- After 2025, uncertainty sets in, we chose the BOFA FCF model here as it is more conservative and BOFA predicts a plateau in the solar market setting in after 2025
- Adjustments to our growth and pricing assumptions move our DCF-based valuation to \$190/sh from \$177/sh

# Comparables Analysis

Comparables Analysis												
Component Details												
All values in millions		ENPH.O F12M	ENPH.O T12M	Energy F12M Average	Energy F12M Median	Energy T12M Average	Energy T12M Median	Renewable Energy F12M Average	Renewable Energy F12M Median	Renewable Energy T12M Average	Renewable Energy T12M Median	
EV/Sales	7	8.3	11.5	5.4	1.7	236.9	1.9	3.8	1.8	28.3	4.0	
EV/EBITDA	13	47.4	36.3	-1.4	4.1	7.2	3.8	-97.3	5.0	43.7	-1.2	
P/E	17	36.5	44.4	35.0	7.4	6.1	3.8	381.5	-1.4	14.7	-1.8	
Price/Cash Flow	20	33.8	39.1	1.1	4.0	-10.4	2.7	-24.4	7.8	-11.6	-5.9	
Price/Book	3	17.4	34.8	1.2	1.5	273.9	1.3	3.5	2.2	-11.7	1.3	
Buyback Yield	14		1.5%			19.5%	1.4%			10.5%	3.3%	
Growth												
Name		5 Yr Hist Growth	Last FY	=>	This FY	=>	Next FY	YoY Growth	NTM/LTM Growth	PEG NTM	LTG Mean	
ENPH.O - Earning Per Share - \$		141.9%	4.62		18.4%	5.47	35.0%	7.38	54.5%	21.6%	1.45	20.1%
Renewable Energy	Average	6.5%			3.9%		108.4%		8.8%	142.7%	0.45	-3.7%
Renewable Energy	Median	-8.8%			8.0%		53.3%		-74.5%	36.7%	0.14	15.0%
ENPH.O - Revenue - \$		52.1%	2,330.85		36.1%	3,171.26	28.1%	4,063.47	63.4%	34.4%		
Renewable Energy	Average	10.1%			58.2%		994.7%		195.0%	994.2%		
Renewable Energy	Median	8.2%			33.2%		28.5%		27.2%	32.1%		

Based on the two figures ( growth rate and EV/EBITDA), sell side analysts reports- we have decided to predict a 37X EV/EBITDA multiple for Enphase

EBITDA 2023E	1034
EV	38258
Equity Value	36948
Equity Value Per Share	271.6764706

- Growth rate of ENPH does not correspond with industry EV/EBITDA,
- A lower EV/EBIDTA is thus chosen to adjust for this uncertainty.

# Valuation

DCF	25%
Comparables	75%

**Total Price: 247.78**

- **A higher comp weightage chosen to reflect current investors sentiment about the value of the share and momentum effects of ENPH,**
- **DCF however, provides a good fundamental understanding of ENPH**



# ESG



# ESG

Environmental	Social	Governance
<ol style="list-style-type: none"><li>1. In 2021 an equivalent of 8 million metric tons of CO2 were prevented from emission due to using ENPH.</li><li>2. 100% of the facilities are ISO 14001:2015 certified which leads to continues improvement of efficiency and sustainability.</li><li>3. The suppliers are screened on presence of environmental commitments.</li><li>4. All e-waste generated from operations is recycled.</li></ol>	<ol style="list-style-type: none"><li>1. ENPH is committed to increase upper management diversity.</li><li>2. “ParityPledge” ensures to have a minimum of one woman and person of colour to be interviewed for each position.</li><li>3. ENPH invests in the physical and mental wellbeing of its employees as well as provides training programs.</li></ol>	<ol style="list-style-type: none"><li>1. The Nominating and Corporate Governance Committee oversees ESG matters. Cross-functional ESG executive leadership team updates them on at least an annual basis on emerging ESG trends.</li><li>2. The company cooperates with a third-party, independent whistleblower to work with anonymous reports regarding the break of the code of conduct.</li><li>3. ENPH is provides mandatory cybersecurity training to new employees and require annual refreshing assignments.</li></ol>

# Risk Analysis



# Risk

- **If demand for solar energy solutions does not grow or grows at a slower rate than they anticipate, their business will suffer.**
- **reduced demand for their products as a result of constraints on capital spending for residential solar energy systems by customers;**
- **increased price competition for their products may adversely affect revenue, gross margin and profitability.**
- **The reduction, elimination or expiration of government subsidies and economic incentives for on-grid solar electricity applications could reduce demand for solar PV systems and harm their business.**
- **They depend on limited-source suppliers for key components and products. If they are unable to source these components and products on a timely basis, they will not be able to deliver their products to customers.**
- **They may fail to capture customers as they design and develop new products and update existing products.**

Business risk

Post 2025



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