United States Securities and Exchange Commission Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934

(Amendment No. 2)*

Maxeon Solar Technologies, Ltd.

(Name of Issuer)

Ordinary Shares (Title of Class of Securities)

> Y58473102 (CUSIP Number)

Aurélien Hamelle General Counsel TOTALENERGIES SE 2, place Jean Millier La Défense 6 92400 Courbevoie France 00-331-4135-2834

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 19, 2023 (Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of § § 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. *See* § 240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the *Notes*).

1	Names of Reporting Persons TotalEnergies SE			
2	Check the Appropriate Box if a Member of a Group (a) \Box (b) \Box			
3	SEC Use Only	7		
4	Source of Funds (See Instructions) OO			
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) □			
6	6 Citizenship or Place of Organization France			
	Number of Shares	7	Sole Voting Power 0	
	Beneficially Owned by	8	Shared Voting Power 8,000,931	
	Each Reporting	9	Sole Dispositive Power 0	
	Person With	10	Shared Dispositive Power 8,000,931	
11	Aggregate Amount Beneficially Owned by Each Reporting Person 8,000,931			
12	2 Check if the Aggregate Amount in Row (11) Excludes Certain Shares □			
13	Percent of Class Represented by Amount in Row (11) 15.2% ¹			
14	4 Type of Reporting Person CO			

¹ Percentage calculated based on (i) 45,409,811 ordinary shares, no par value (the "Ordinary Shares"), of Maxeon Solar Technologies, Ltd. (the "Issuer") issued and outstanding as of April 2, 2023, as reported by the Issuer in its Registration Statement on Form F-3ASR filed with the U.S. Securities and Exchange Commission on May 16, 2023, (ii) 5,620,000 Ordinary Shares issued and sold by the Issuer in connection with the Offering (as defined below) and (iii) 1,500,000 Ordinary Shares issued by the Issuer in a private placement concurrent with the Offering.

1	Names of Reporting Persons			
	TotalEnergies Gaz & Electricité Holdings SAS			
2	Check the Appropriate Box if a Member of a Group			
	(a) 🗆 (b) 🗆			
3	SEC Use Only	7		
4				
	00			
5		osure of le	egal proceedings is required pursuant to Items 2(d) or 2(e)	
6	Citizenship or	Place of C	Drganization	
	France			
Number of		7	Sole Voting Power	
-	Shares		0	
E	Beneficially	8	Shared Voting Power	
	Owned by		8,000,931	
	Each	9	Sole Dispositive Power	
	Reporting Person		0	
	With	10	Shared Dispositive Power	
			8,000,931	
11				
	8,000,931			
12	2 Check if the Aggregate Amount in Row (11) Excludes Certain Shares			
- 10	_			
13	I S ()			
	$15.2\%^{1}$			
14	4 Type of Reporting Person			
	СО			

¹ Percentage calculated based on (i) 45,409,811 Ordinary Shares issued and outstanding as of April 2, 2023, as reported by the Issuer in its Registration Statement on Form F-3ASR filed with the U.S. Securities and Exchange Commission on May 16, 2023, (ii) 5,620,000 Ordinary Shares issued and sold by the Issuer in connection with the Offering and (iii) 1,500,000 Ordinary Shares issued by the Issuer in a private placement concurrent with the Offering.

TotalEnergies		sons	
	Names of Reporting Persons TotalEnergies Solar INTL SAS		
Check the Appropriate Box if a Member of a Group (a) (b) (c)			
SEC Use Only	r		
SEC Use Only Source of Funds (See Instructions) OO			
Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) □			
6 Citizenship or Place of Organization France			
Number of Shares	7	Sole Voting Power 0	
Beneficially Owned by	8	Shared Voting Power 8,000,931	
Each Reporting	9	Sole Dispositive Power 0	
Person With	10	Shared Dispositive Power 8,000,931	
Aggregate Amount Beneficially Owned by Each Reporting Person 8,000,931			
2 Check if the Aggregate Amount in Row (11) Excludes Certain Shares □			
 Percent of Class Represented by Amount in Row (11) 15.2%¹ 			
4 Type of Reporting Person CO			
	SEC Use Only Source of Func OO Check if discle Citizenship or France Number of Shares Beneficially Owned by Each Reporting Person With Aggregate Am 8,000,931 Check if the A Percent of Class 15.2% ¹ Type of Report	SEC Use Only Source of Funds (See Ins OO Check if disclosure of le Citizenship or Place of C France Number of Shares Beneficially Sowned by Each Person 10 With Aggregate Amount Bene 8,000,931 Check if the Aggregate A Percent of Class Represe 15.2% ¹ Type of Reporting Person	

¹ Percentage calculated based on (i) 45,409,811 Ordinary Shares issued and outstanding as of April 2, 2023, as reported by the Issuer in its Registration Statement on Form F-3ASR filed with the U.S. Securities and Exchange Commission on May 16, 2023, (ii) 5,620,000 Ordinary Shares issued and sold by the Issuer in connection with the Offering and (iii) 1,500,000 Ordinary Shares issued by the Issuer in a private placement concurrent with the Offering.

Explanatory Note

This Amendment No. 2 (this "Amendment No. 2") to Schedule 13D amends the Schedule 13D of the Reporting Persons (as defined below) that was initially filed on September 8, 2020 (the "Initial Filing") with the Securities and Exchange Commission (the "SEC"), as amended by Amendment No. 1 to Schedule 13D filed with the SEC on November 1, 2022 ("Amendment No. 1" and, together with the Initial Filing, the "Amended Filing"), relating to the Ordinary Shares of the Issuer. Information reported in the Amended Filing remains in effect except to the extent that it is amended, restated or superseded by information contained in this Amendment No. 2 (together with the Amended Filing, the "Schedule 13D"). Capitalized terms used but not defined in this Amendment No. 2 have the respective meanings set forth in the Amended Filing.

Item 2. Identity and Background.

This Amendment No. 2 amends Item 2 of the Initial Filing in its entirety as set forth below:

This Schedule 13D is being filed by the following entities (each, a "Reporting Person", and collectively, the "Reporting Persons"):

- 1) TotalEnergies SE, a societas europea organized under the laws of the Republic of France ("TotalEnergies SE"),
- 2) TotalEnergies Gaz & Electricité Holdings SAS, a French société par actions simplifiée ("TotalEnergies Gaz") and
- 3) TotalEnergies Solar INTL SAS, a French société par actions simplifiée (the "Selling Shareholder").

The business address of each of TotalEnergies SE, TotalEnergies Gaz and the Selling Shareholder and each of their respective directors and executive officers is 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France. Together with its subsidiaries and affiliates (including the Reporting Persons), TotalEnergies SE, a broad energy company with a presence in nearly 130 countries on five continents, is a major energy player that produces and markets fuels, natural gas and low-carbon electricity. The Reporting Persons' activities include the exploration and production of oil and gas, refining, petrochemicals and petroleum product retailing, solar power, sustainable biofuels and electricity, primarily from renewable sources.

Information with respect to the directors and executive officers of each of the Reporting Persons is provided on Schedule A attached hereto.

During the last five years, none of the Reporting Persons nor, to the best of the Reporting Persons' knowledge, any of their respective directors or executive officers (i) have been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) were parties to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding were or are subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 4. Purpose of Transaction.

This Amendment No. 2 amends Item 4 of the Amended Filing by adding to the end thereof, the paragraphs set forth below:

On May 17, 2023, the Selling Shareholder entered into an underwriting agreement (the "Underwriting Agreement") with the Issuer and BofA Securities, Inc. and Morgan Stanley & Co. LLC, as representatives (the "Representatives") of the several underwriters (collectively, the "Underwriters"), pursuant to which the Selling Shareholder agreed to sell 2,993,500 Ordinary Shares at a price of \$27.09 per Ordinary Share (the "Offering") to the Representatives, pursuant to the terms and conditions of the underwriting agreement (the "Underwriting Agreement") entered into between the Issuer, the Selling Shareholder and the Underwriters. The offering price to the public of such Ordinary Shares was \$28.00 per Ordinary Share. The Offering, including the full exercise of the Underwriters' option to purchase additional Ordinary Shares, was consummated on May 19, 2023.

In connection with the Offering, each of the Selling Shareholder and TotalEnergies Gaz entered into lock-up agreements (the "Lock-Up Agreements") with the Representatives, pursuant to which the Selling Shareholder and TotalEnergies Gaz, have agreed that, subject to limited exceptions, for a period of 60 days after the date of the Underwriting Agreement, without the prior written consent of BofA Securities, Inc., they will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise dispose of or transfer any Ordinary Shares or any securities convertible into or exchangeable or exercisable for the Ordinary Shares which the Selling Shareholder and TotalEnergies Gaz owns or hereafter acquires or with respect to which the Selling Shareholder and TotalEnergies Gaz has or hereafter acquires the power of disposition, (ii) enter into any swap, hedge or other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequences of ownership of the Ordinary Shares or such other securities, whether any such swap, hedge or transaction described is to be settled by delivery of the Ordinary Shares or such other securities, in cash or otherwise or (iii) otherwise publicly announce any intention to engage in or cause any action or activity described in clauses (i) or (ii) above.

The foregoing descriptions of the Underwriting Agreement and the Lock-Up Agreements do not purport to be complete and are qualified in their entirety by reference to the Underwriting Agreement and the form of lock-up agreement, which are filed as Exhibits 5 and 6 respectively, hereto and are incorporated herein by reference.

Item 5. Interest in Securities of the Issuer.

This Amendment No. 2 amends and restates Items 5(a) and 5(c) of the Amended Filing as set forth below:

(a) The information set forth in rows 7 through 13 (and related footnotes) of each of the cover pages of this Amendment No. 2 are incorporated herein by reference. Such information is as of the date hereof and the number and percentage of Ordinary Shares to which this Schedule 13D relates is 8,000,931, constituting 15.2% of the sum of (i) 45,409,811 Ordinary Shares outstanding as of April 2, 2023, (ii) 5,620,000 Ordinary Shares issued and sold by the Issuer in connection with the Offering and (iii) 1,500,000 Ordinary Shares issued by the Issuer in a private placement concurrent with the Offering.

(c) On May 17, 2023, the Selling Shareholder agreed to sell 2,993,500 Ordinary Shares pursuant to the Underwriting Agreement, as described in Item 4 to this Amendment No. 2, which sale was consummated on May 19, 2023. No other transactions involving Ordinary Shares were effected during the past sixty days.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

This Amendment No. 2 amends Item 6 of the Amended Filing by adding to the end thereof, the disclosure set forth under Item 4 of this Amendment No. 2, which is incorporated herein by reference.

Item 7. Material to be Filed as Exhibits

Item 7 of the Amended Filing is hereby amended and supplemented by adding the following at the end thereof:

Exhibit Number	Description			
<u>5</u>	<u>Underwriting Agreement, dated May 17, 2023, by and among Maxeon Solar Technologies, Ltd., TotalEnergies Solar INTL SAS, BofA</u> Securities, Inc. and Morgan Stanley & Co. LLC, as representatives of the several underwriters listed therein (incorporated by reference to			
<u>6</u>	Exhibit 99.1 of the Issuer's Current Report on Form 6-K filed on May 19, 2023). Form of Lock-Up Agreement (included as Exhibit A to the Underwriting Agreement filed as Exhibit 5 hereto)			

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: May 23, 2023

TOTALENERGIES SE

By:	/s/ Aurélien Hamelle

Name: Aurélien Hamelle Title: General Counsel

TOTALENERGIES GAZ & ELECTRICITÉ HOLDINGS SAS

 By:
 /s/ Noémie Malige

 Name:
 Noémie Malige

 Title:
 Vice-President

TOTALENERGIES SOLAR INTL SAS

By: /s/ Noémie Malige

Name: Noémie Malige Title: Vice-President

SCHEDULE A

TOTALENERGIES SE

Name	Occupation	Citizenship
Patrick Pouyanné	Chairman and Chief Executive Officer	French
Helle Kristoffersen	President, Strategy & Sustainability	French and Danish
Stéphane Michel	President, Gas, Renewables & Power	French
Thierry Pflimlin	President, Marketing & Services	French
Bernard Pinatel	President, Refining & Chemicals	French
Jean-Pierre Sbraire	Chief Financial Officer	French
Namita Shah	President, OneTech	French
Nicolas Terraz	President, Exploration & Production	French
Jacques Aschenbroich	Director	French
Patricia Barbizet	Director	French
Marie-Christine Coisne-Roquette	Lead Independent Director	French
Jérôme Contamine	Director	French
Lise Croteau	Director	Canadian
Mark Cutifani	Director	Australian
Emma de Jonge	Director representing employee shareholders	French
Romain Garcia-Ivaldi	Director representing employees	French
Maria van der Hoeven	Director	Netherlands
Glenn Hubbard	Director	American
Anne-Marie Idrac	Director	French
Jean Lemierre	Director	French
Angel Pobo	Director representing employees	French

TOTALENERGIES GAZ & ELECTRICITE HOLDINGS SAS

Laurent Wolffsheim	President	French	
Noémie Malige	Vice-President	French	

TOTALENERGIES SOLAR INTL SAS

Vincent Stoquart	President	Belgian French	
Noémie Malige	Vice-President		
Benoît Lombardet	Vice-President	French	
Bruno Leconte	Vice-President	French	
Laurent Becerra	Vice-President	French	