

IN THE BATTLE FOR MARKET SHARE IN THE POWER MIX: SOLAR HAS WON

WHAT NEXT?
by Laurent Segalen

London - 4 June 2020

MEGAWATT - X



Who we are?



PROJECTS



PODCAST



PPA

Megawatt-X

- *Brokering of Wind and Solar Assets*
- *Established 2013*
- *14GW listed*
- *3,000 members*

Redefining Energy

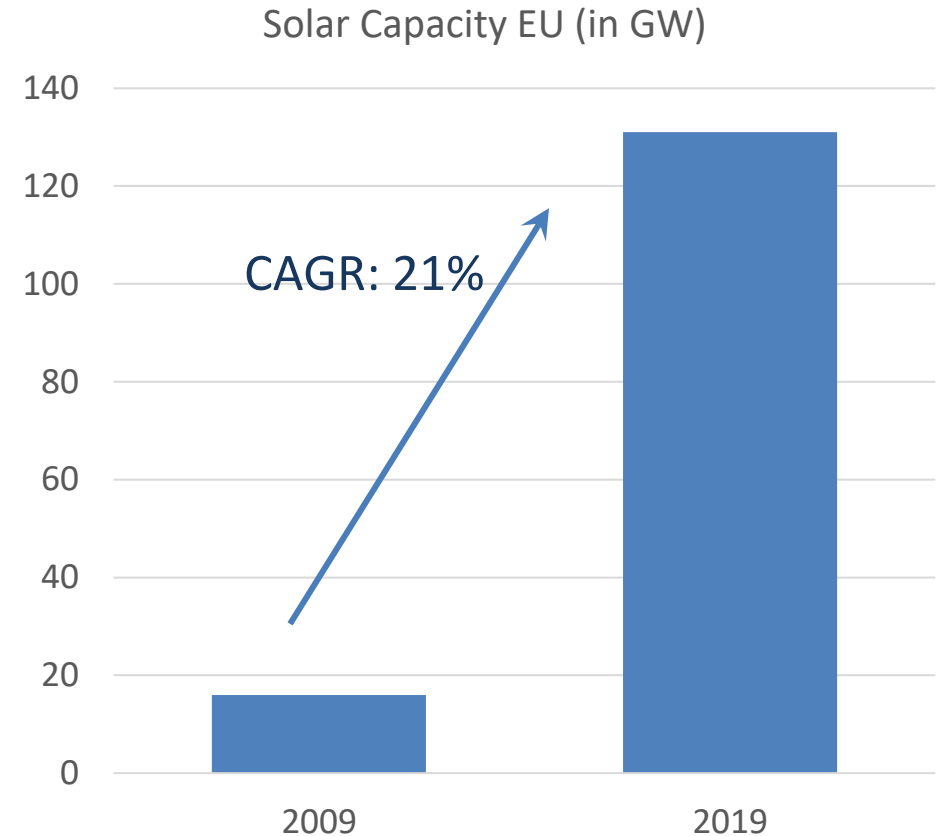
- *Top 5 podcast on Renewable Energy (source player.fm)*
- *27 Episodes since 2018*
- *6,000 downloads a month*

Zeigo

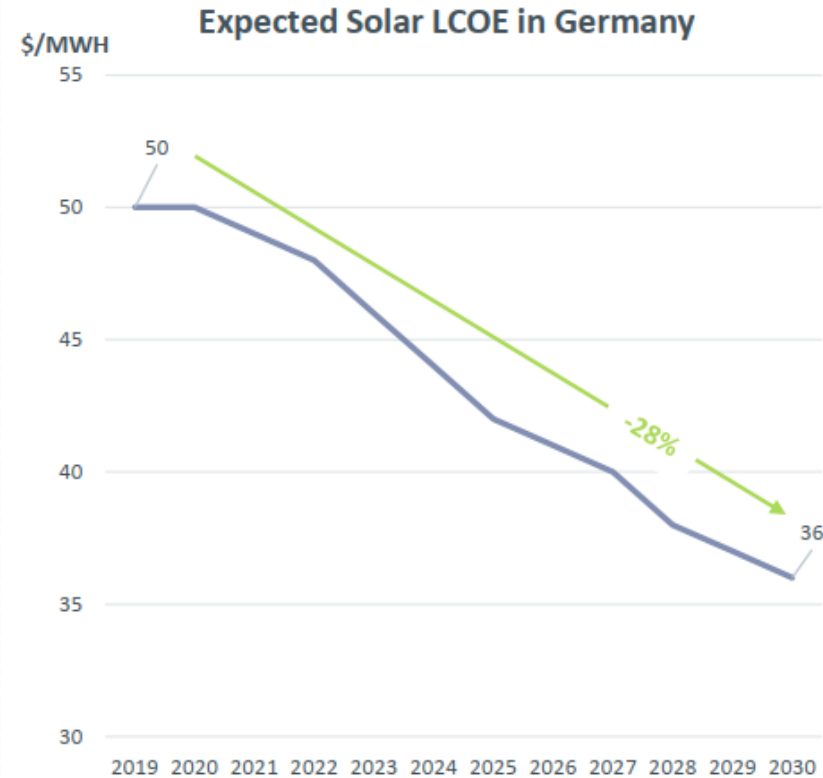
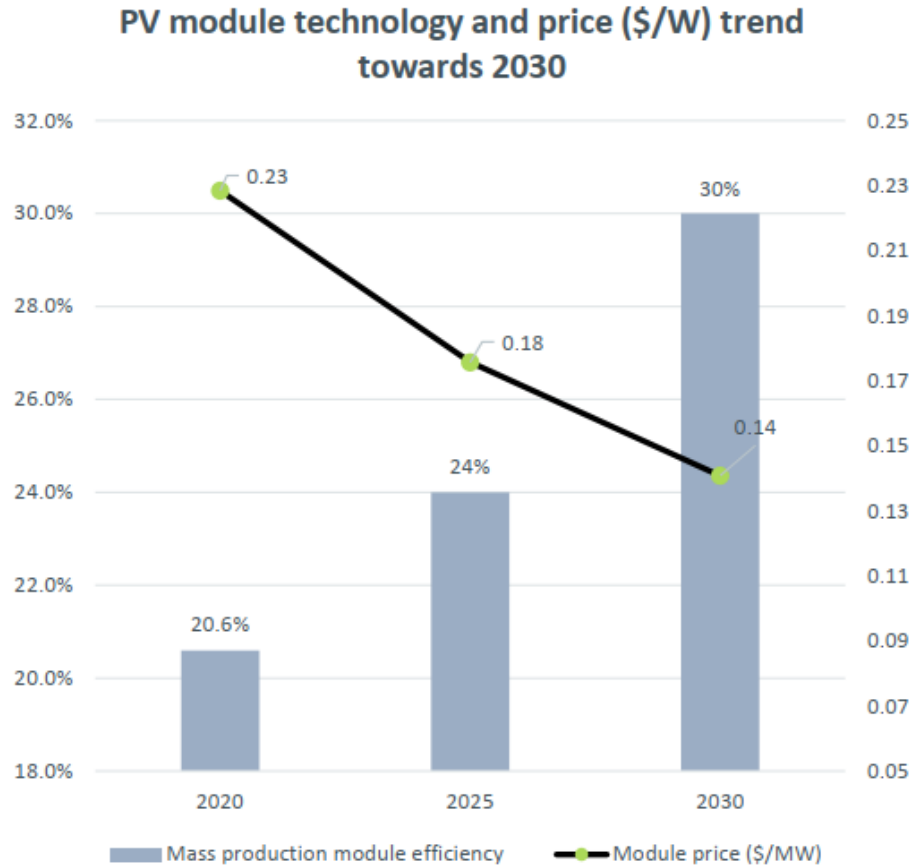
- *PPA Platform*
- *Renewable Technology of the Year (Business Green)*
- *Best RFP process*
- *Digital PPAs with DLA Piper*
- *300 projects for 18GW*

Solar has won!

- Fastest growing source of Energy in the EU: x8 in a decade
- Costs went down by 85%
- Most competitive source of Power
- Cheapest source of capital (100bps lower than wind)
- Fastest time to market
- Most modular source of Energy
- Most predictable source of Energy (highest ratio estimates/real)
- Cheapest to maintain
- Most evolutive with newer technology coming in all the time



Solar is the cheapest now and will become even cheaper...



Source: Alexa Capital

Solar costs will decrease more than half over the next decade

Source: WEF, Trina Solar, Longi, and various other market participants

ALEXA|CAPITAL |

The 2020's will be different from the 2010's

Never forget our mission to investors: we deliver a predictable fixed income. It is not in our mandate to take merchant risk

—5% / 4% / 6% is far more preferable to 1% / 15% / 7%

- As a developer, should I wait for the new EU Green Deal and a new generation of FIT, or do I go subsidy-free? And at what price per MWh?
- Renewable power doesn't live in a vacuum. They have advantages: merit order, GOO, non carbon... but at the end of the day they trade on the same playground as fossil-fuels
- In Forward Curves we trust:

Country	Exchange	Contract	Price*
Scandi	Nordpool	CAL23	26EUR/MWh
Germany	EEX	CAL22	41(b) – 51(p) EUR/MWh
Spain	OMIP	CAL21	45EUR/MWh

_*as of June 1st 2020

Subsidy Free. The temptation of going merchant

Number of banks in the EU willing to finance a Solar project WITH a PPA	Number of banks in the EU willing to finance a Solar project WITHOUT a PPA
80+	0



2020's PPAs will be different from the 2010's PPAs

- Bye bye – Pay as Produced from a simple SPV with a broker
- Welcome - PCG, Synthetics, Credit Support, Shape, Auctioning platforms ...
- 4 categories of off-takers with very different strategies, will lead to different PPA negotiations

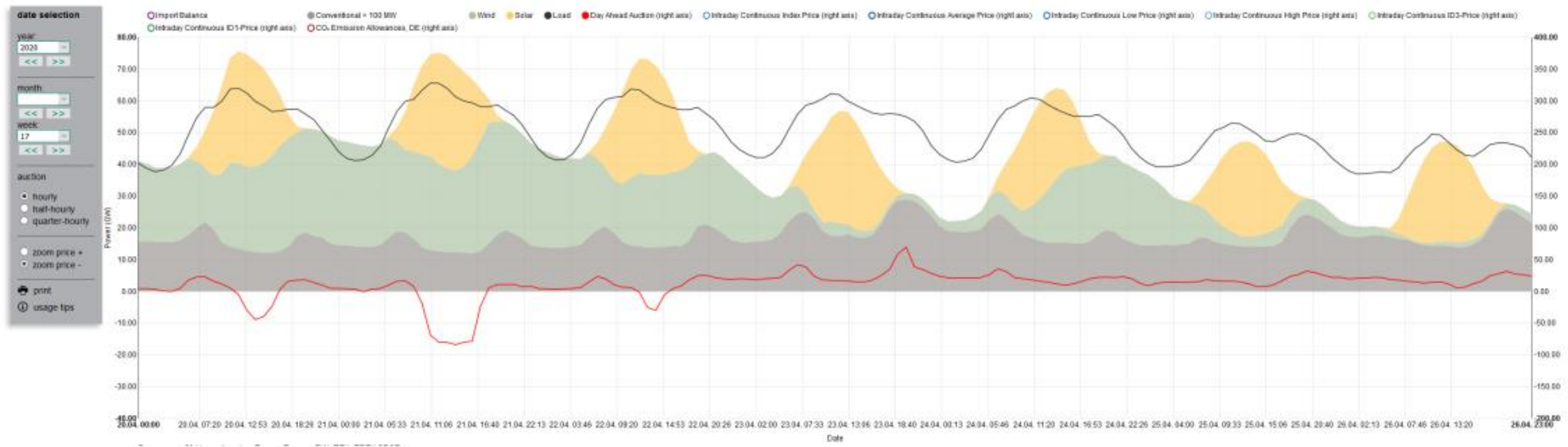
Type	Sustainability	Hedging	Optionality
Techgiant	+++	+	
Large Energy Consumer	+	+++	
Traders			+++
RE-100	+++		

The 2 words that will define the 2020's (1/2): Flexibility

Challenge 1: Harness flexibility

- Because average prices are going to be (1) lower, but also (2) much more volatile, and there is a lot of value in that flexibility
- No way you do an investment in solar without thinking storage
- US 4 hours (ITC), EU 1 hour... but we will get there, as Battery prices come down

Electricity production and spot prices in Germany in week 17 2020



The 2 words that will define the 2020's (2/2): Digitization

Challenge 2: Understand the digitalisation of the Grid and Energy trading

- Assess the value of solar power in a decentralised and neuralised network
- We all want large scale, but new models may be much more distributed
- VPP will remove stress on the Grid.



Stick to your mission, don't do things you don't understand, especially considering the new entrants

If you believe you leave too much money on the table by hedging, do it yourself... but:

- Good luck competing against Google and Tesla...
- Where you trade (PPA platform) is where the market is, and get on with it. *(reminder: you are here to deliver a fixed income)*
- Market structures are imperfect... get on with it

REPORT

Tesla applies for license to become UK electricity provider

The company may be looking to introduce its Autobidder platform



REUTERS

May 3rd 2020 at 11:49AM



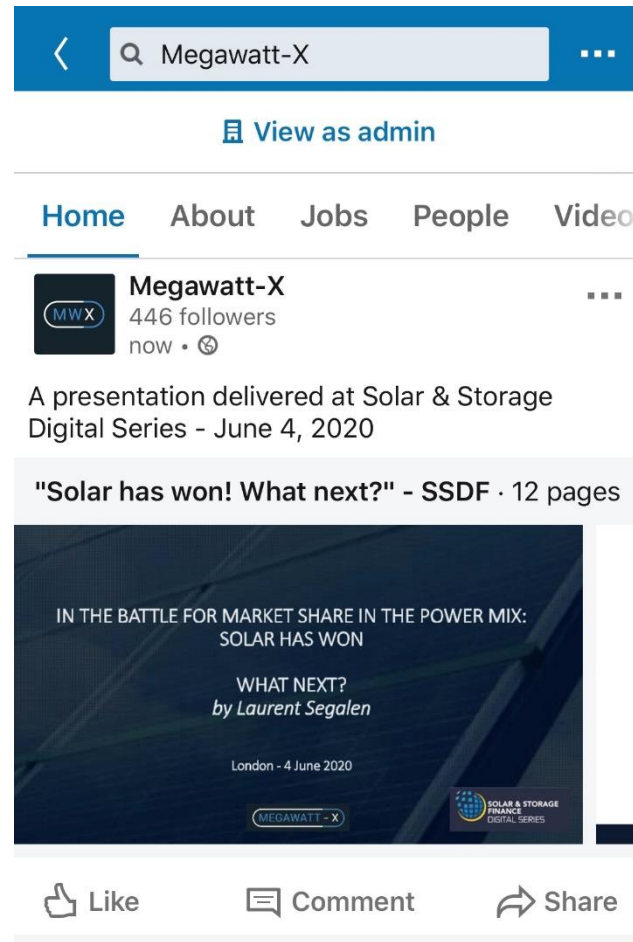
Conclusion

- Never forget **Solar is a fixed income investment**
- Don't try to outsmart the market / Don't do things you don't understand
- Don't bet your all business model on subsidies and future big Top-Down EU programs
- Be more **Digital**
- Be more agile, especially develop a much more dynamic ALM - more short term debt, short term PPA.
- At the same time, think long term: a Solar park will last 100 years (and will permanently be improved)

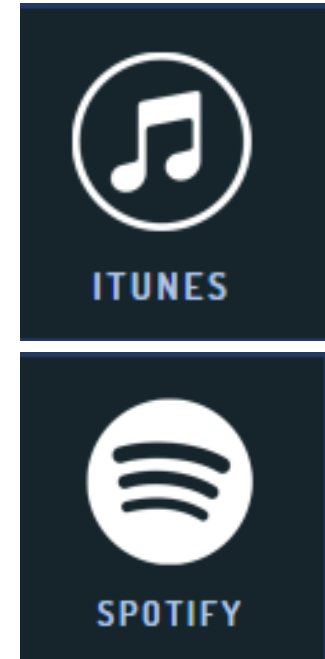
Final Words:

I am optimist, Solar leads the merit order, benefits from cutting edge technology, ever decreasing costs so... "XIXth century Coal" and "Cold War Nuclear" don't stand a chance against Solar.

You can download this presentation from LinkedIn



And listen to Redefining Energy podcast!



Thank you

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