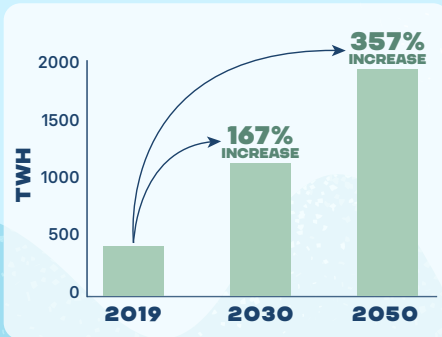


# HOW MUCH WILL IT TAKE?

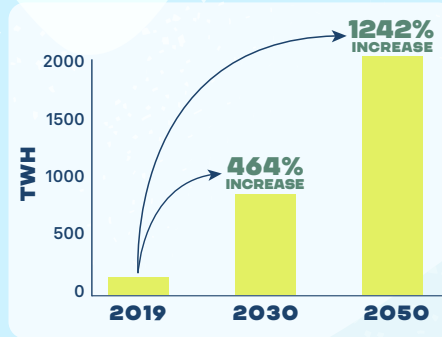
## EXPLORING THE SCALE OF WIND & SOLAR REQUIRED FOR THE EU AND UK TO REACH NET-ZERO EMISSIONS

### GROWTH OF WIND & SOLAR FOR ELECTRICITY GENERATION

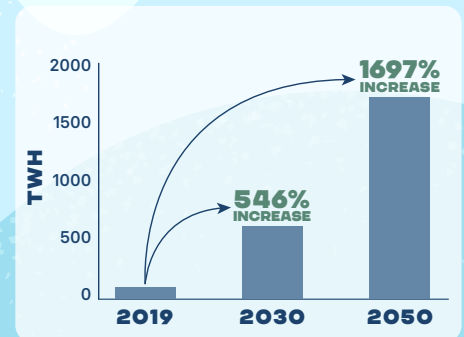
#### ONSHORE WIND



#### SOLAR



#### OFFSHORE WIND



### SCALE COMPARISON



Net-zero by 2050 requires **1,189 GW** of solar capacity  
That would necessitate approximately **3.7 BILLION SOLAR PANELS**  
Meaning the EU and UK would have to deploy an additional  
**118 MILLION SOLAR PANELS** every year from now until 2050!



Net-zero by 2050 requires **1,163 GW** of total wind capacity  
That would necessitate approximately **328,501 WIND TURBINES**  
Meaning the EU and UK would have to deploy an additional  
**9,350 WIND TURBINES** every year from now until 2050!

### BUILD RATE



Historically, the EU has built **23 GW** of new wind and solar a year on average from 2011-2020. In our net-zero pathways, the EU will need to build on average between:  
**27-79 GW OF SOLAR ANNUALLY**  
**6-25 GW OF ONSHORE WIND ANNUALLY**  
**11-22 GW OF OFFSHORE WIND ANNUALLY**

### INVESTMENT NEEDS

The EU and UK must invest **€672 BILLION** in onshore wind, **€697 BILLION** in offshore wind, and **€633 BILLION** in solar between **2020-2050** to reach net-zero emissions.



Complementing renewables with other clean energy technologies can save the EU & UK **€80 BILLION** a year by **2050** compared to a renewables-only strategy.