

Overall:

As each section is revealed the navy sections subtly pop up from behind the main section,

**1.** Background of battery charges.

and connect to complete the cell.

2. Extra parts of the solar cell move in

Four years
later Vanguard 1
became the first
satellite powered
by solar in 1958

The Vanguard 1 remains the oldest
mannade satellite in orbit, logging
more than 6 billion miles.

Source: US Dapartment of
Energy, June 2018.

That was 1958, why isn't everything now
powered by solar?

Well, cost is one of the reasons, but this is improving...

3. Satellite rotates following the

dotted line

now roughly \$0.21 per watt.

In 1977, it cost \$77 per watt for a simple solar cell, the cost of a solar cell is

Between 1977 and 2017 solar panel

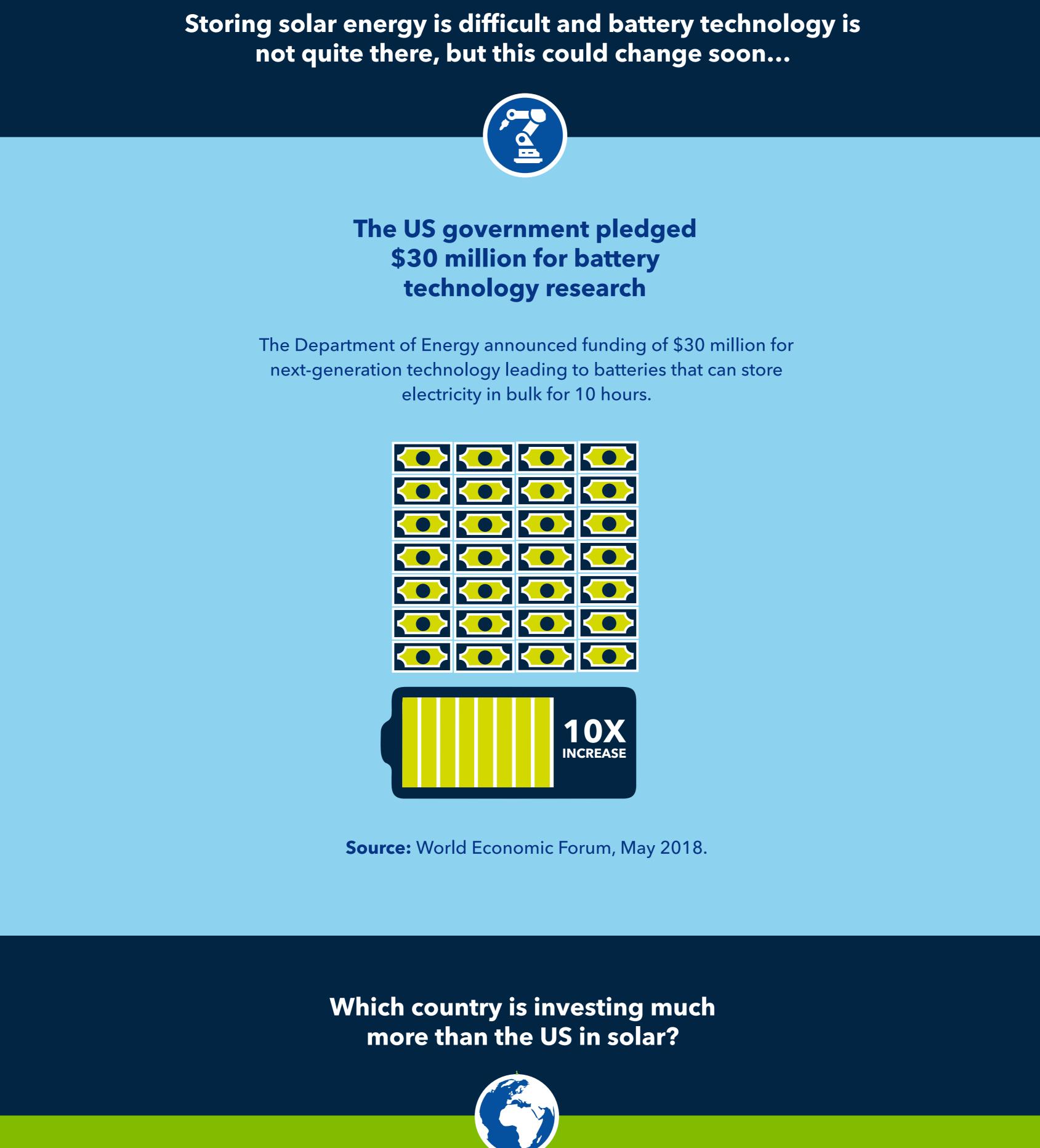
costs fell by 99%



What else has held it back?

calendar points and sign appears.

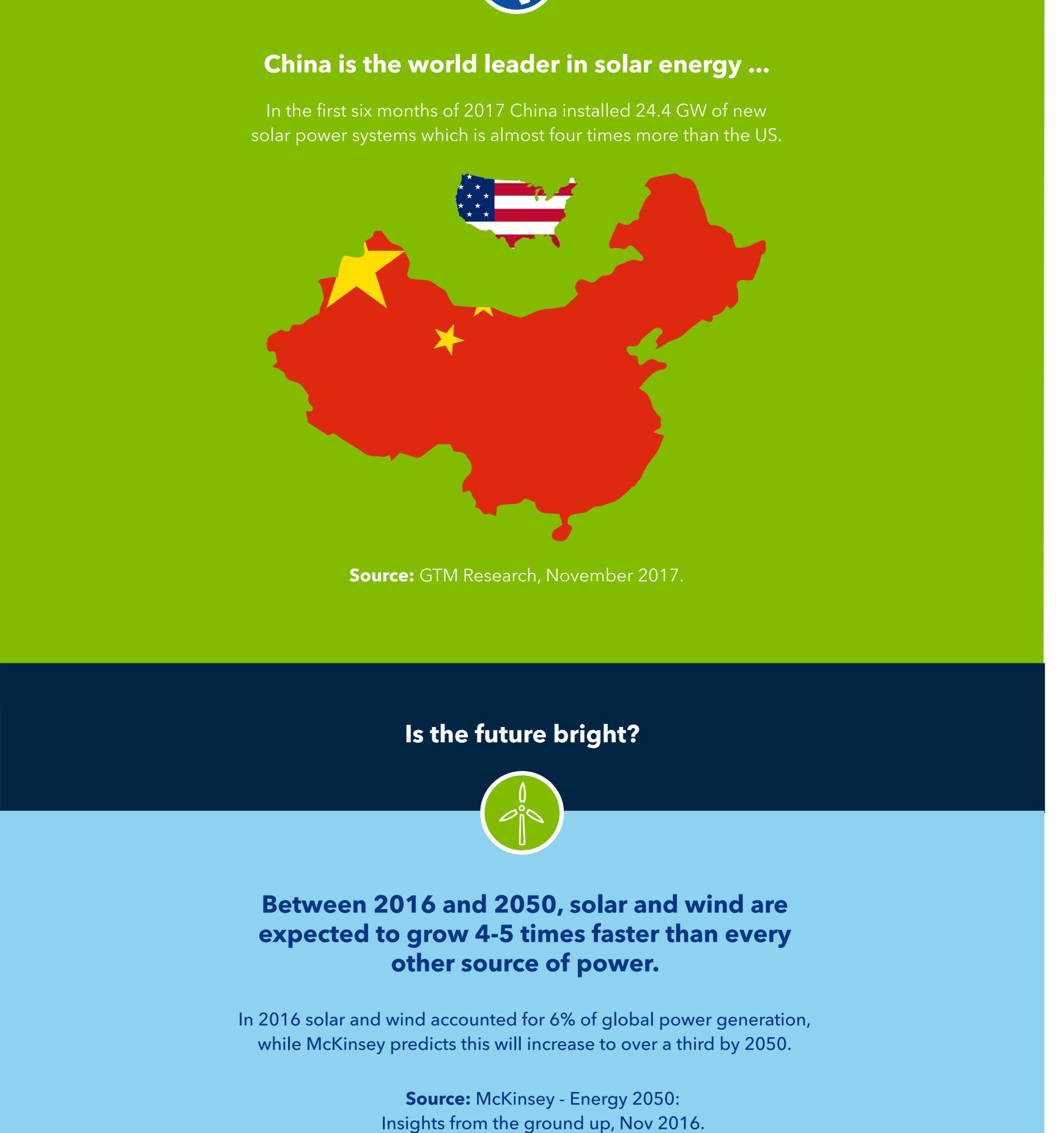
**4.** Line draws in between two



5. Money stack grow on the right of

the battery while the battery green

increases bars increase too.



6. Both countries grow in at the same

rate.



7. Turbines turn slowly



## 1954 to 2050: Shining a light on solar iShares explores the past present and

future of solar through illuminating 7 facts Capital at risk. All financial

investments involve an element of risk. Therefore, the value of the investment and the income from it will vary and the initial investment amount cannot be guaranteed.

What's the big picture?



There's enough solar energy hitting the Earth every hour to meet all of world's

Firstly, solar power is the most abundant energy source on Earth

power needs for an entire year. 100%

> Source: US Department of Energy, June 2018.

Way back in 1954 the

Where did it all start?



**Bell Laboratories** The New York Times proclaimed the milestone, "the beginning of a new era, leading eventually to the realization

of one of mankind's most cherished

dreams -- the harnessing of the almost limitless energy of the sun for the uses of civilization."

Things rocketed forward after this and...

**Source:** US Department of Energy, June 2018.

Four years later Vanguard 1

became the first

satellite powered

by solar in 1958

The Vanguard 1 remains the

oldest manmade satellite in

orbit, logging more than



That was 1958, why

isn't everything now

powered by solar?

Well, cost is one of

the reasons, but this is

improving... Between 1977 and

2017 solar panel costs fell by 99% In 1977, it cost \$77 per watt for a simple solar cell, the cost of a solar cell is now roughly \$0.21 per watt.



What else has held it

back?

Storing solar energy is difficult and battery technology is not quite there, but this could

change soon...

The US government

pledged \$30 million

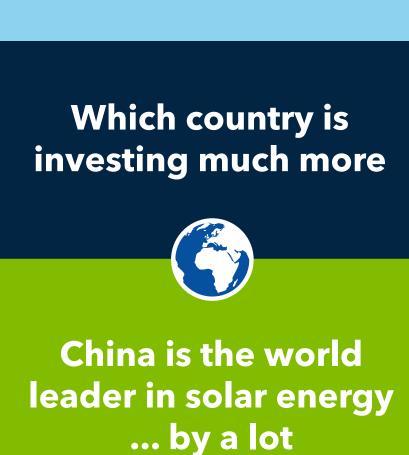
for battery technology

research

The Department of Energy announced funding of \$30 million for next-generation technology leading to batteries that can store electricity in bulk for 10 hours. 

**Source:** World Economic

Forum, May 2018.



In the first six months of 2017 China installed 24.4 GW of new solar

power systems which is almost four times more than the US.

Source: GTM Research, November 2017.

Is the future bright?

Between 2016 and

2050, solar and wind are

expected to grow 4-5

times faster than every

other source of power. In 2016 solar and wind accounted for 6% of global power generation, while McKinsey predicts this will increase to over a third by 2050.

Source: McKinsey - Energy 2050:

Insights from the ground up, Nov

Investing in a

sustainable future

It's important for investors to recognise

there are both risks and opportunities

arising from with the transition to a low

carbon economy as well as broader sustainability and social issues that can and often do impact portfolios. It's also important to realize there are more opportunities to take action, moving from the idea of sustainable

investing to effective implementation. At

BlackRock, we are passionate about

providing our clients with a clearer

picture of the relationship between

sustainability issues, risk and long-term

financial performance, enabling more

investors to act today.

Sustainable investing with iShares ETFs For those wishing to invest sustainably, and willing to take on the associated risks, ETFs may help provide efficient,

range of products tracking sustainable indices, ETFs could offer a convenient and cost-efficient way to incorporate sustainable considerations into a portfolio.

View our range of

sustainable ETFs >

transparent market access. With a wide