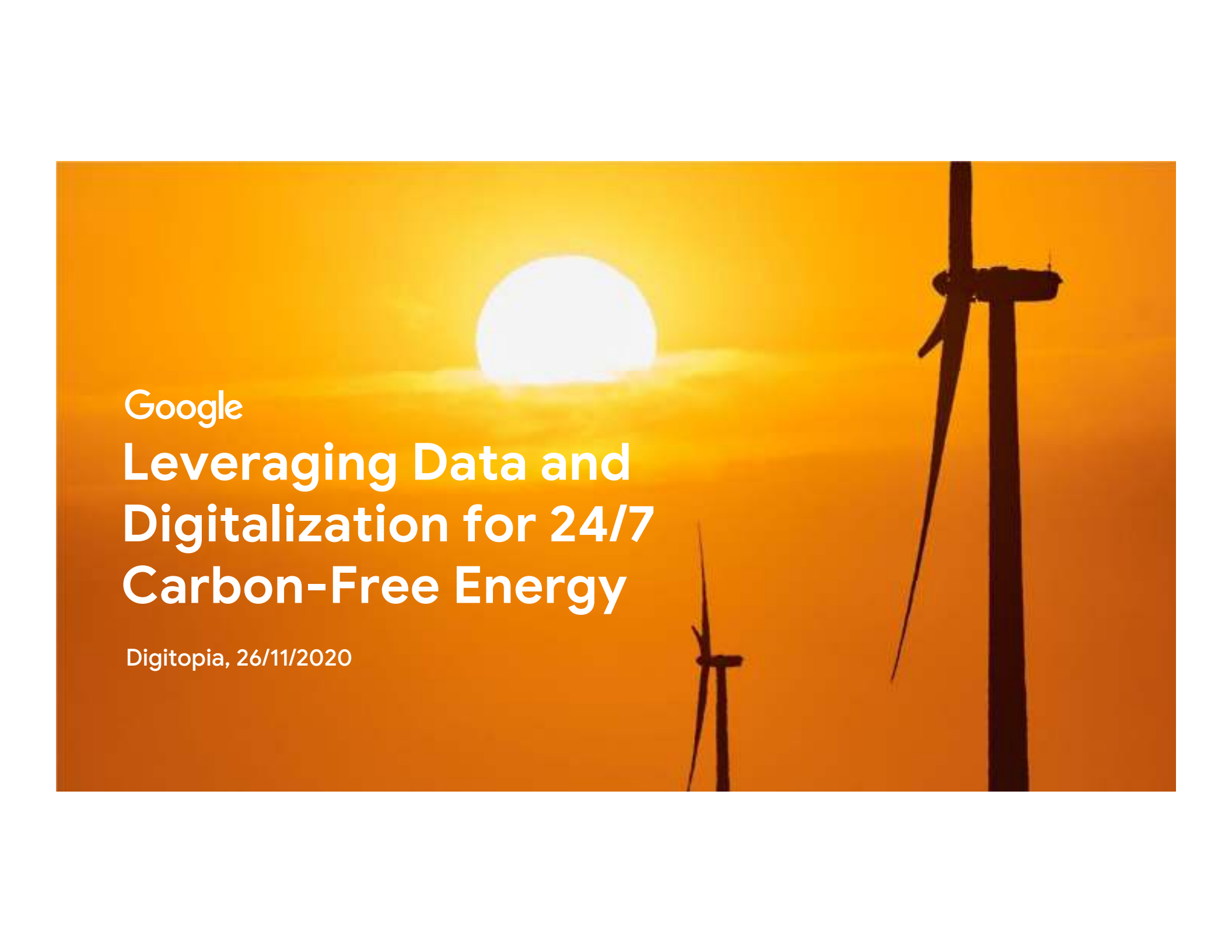




Google

Leveraging Data and Digitalization for 24/7 Carbon-Free Energy

Digitopia, 26/11/2020

Google's Energy Journey

Carbon Neutrality

(Offsetting emissions)



Since 2007

Google has purchased enough high-quality carbon offsets and renewable energy to bring our net operational emissions to zero.

100% Renewable Energy

(Reducing emissions)



Since 2017

Google has matched its global, annual electricity use with wind and solar purchases. However, our facilities still rely on carbon-based power in some places and times.

24/7 Carbon-free Energy

(Eliminating emissions)



By 2030

Google intends to match its operational electricity use with nearby (on the same regional grid) carbon-free energy sources in every hour of every year.

Carbon-intelligent load-shifting

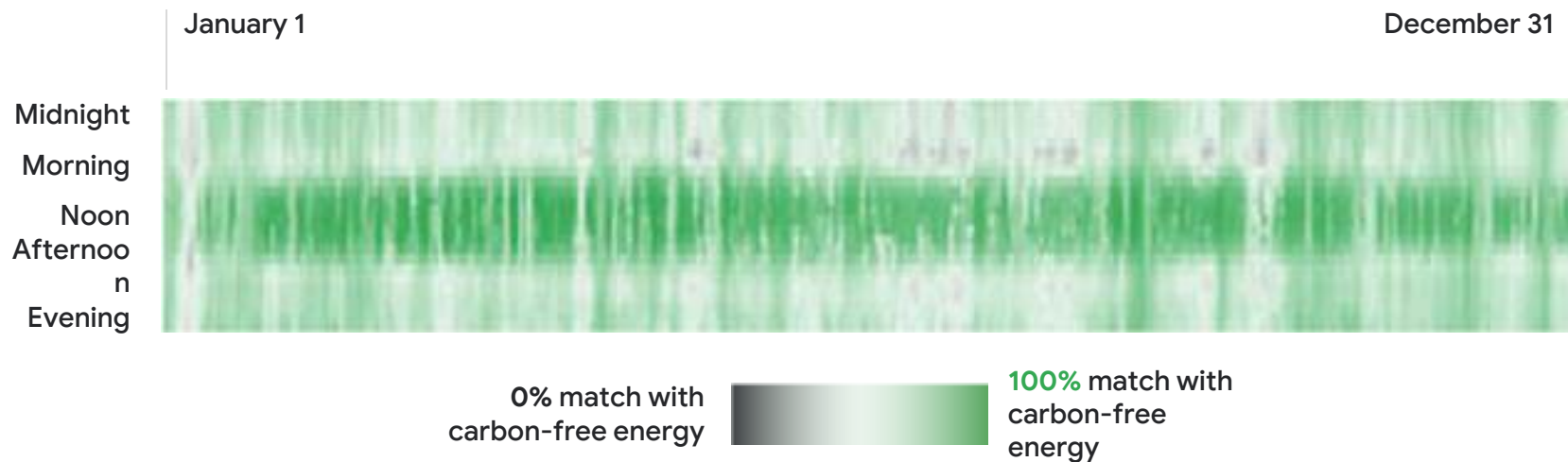
Reducing data centre carbon footprints by shifting flexible compute tasks to align with greener hours on the grid

Conventional compute load

Execution of compute tasks throughout the day, regardless of carbon impact



We aspire to source **100%** carbon-free energy at all times



Google

Google

Aligning compute load with carbon-free energy

Google's carbon intelligent computing platform shifts flexible loads to times when wind and solar are abundant on the grid.

