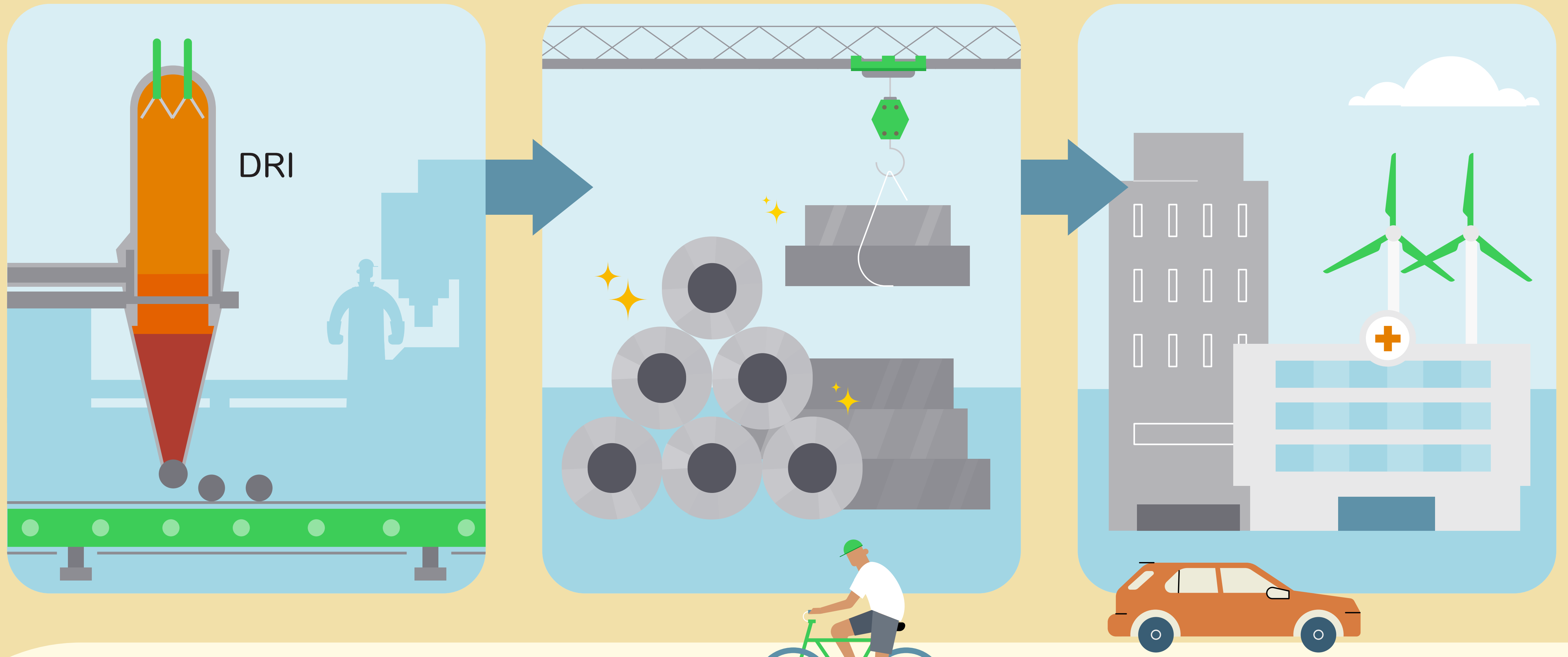


Rethink steel ...

Green steel for a sustainable future



Did you know steel ...

Is essential in our daily lives?



Key in urbanization
Protects and provides frameworks for buildings¹

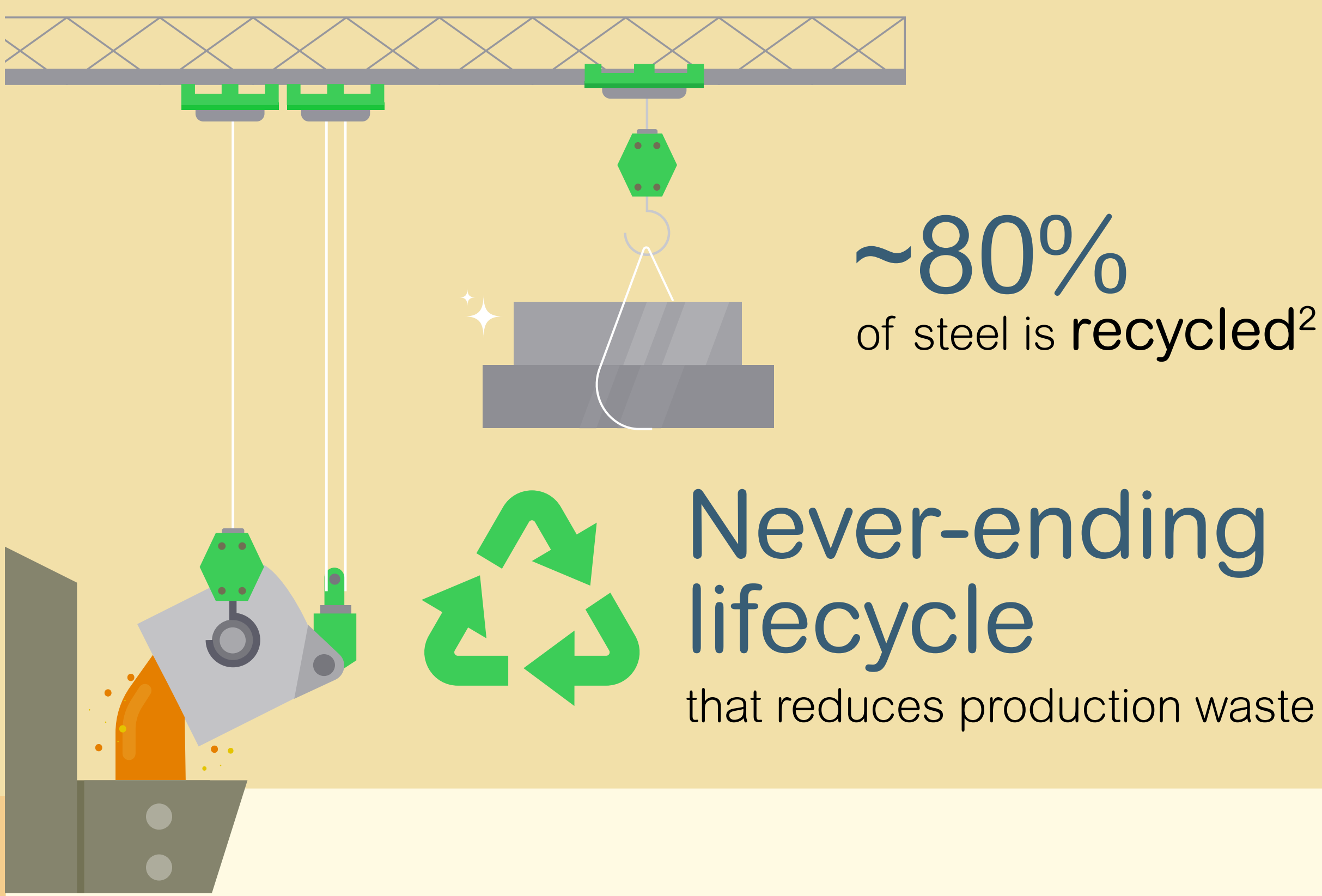


Ensures mobility
100% of rail tracks are steel¹



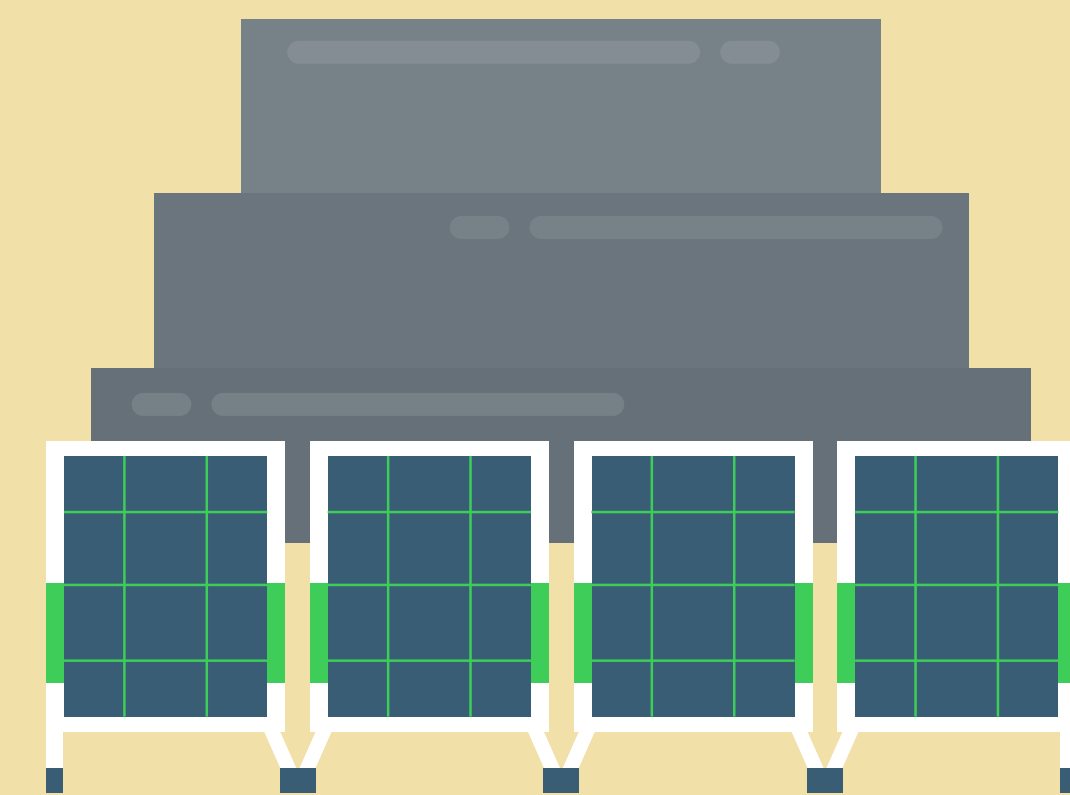
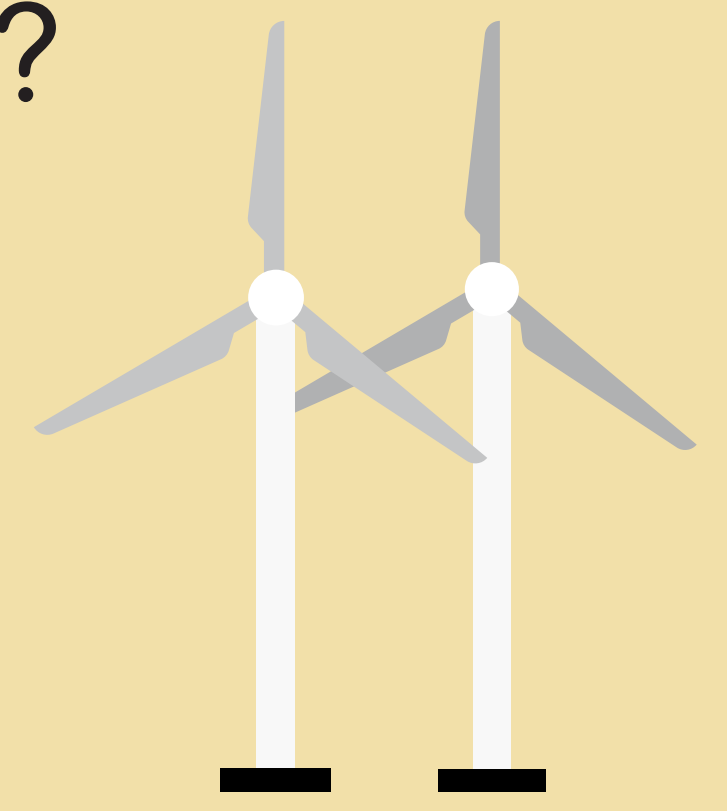
Delivers food and beverage
1,500 food and drink items are canned¹

Is one of the most highly recycled materials in use today?



Is an integral ingredient for the energy transition?

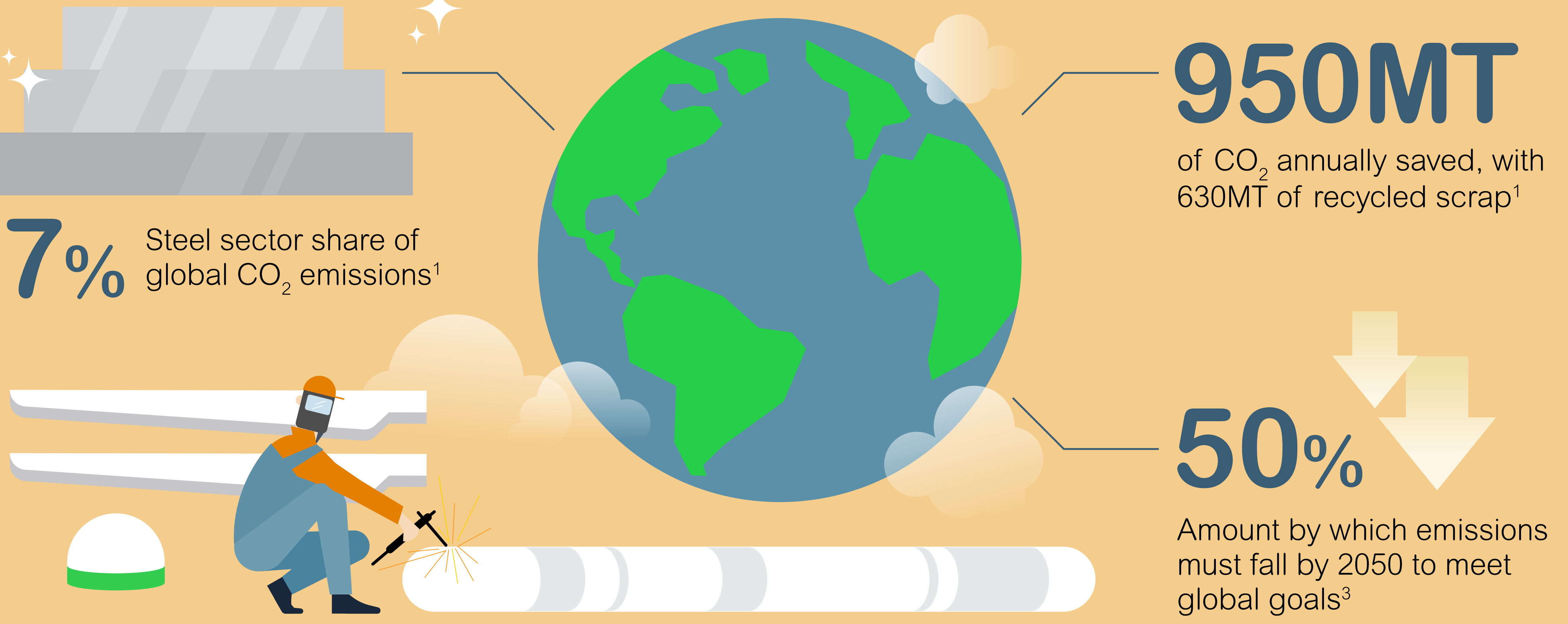
~80% of a wind turbine is made of steel¹



Design flexibility

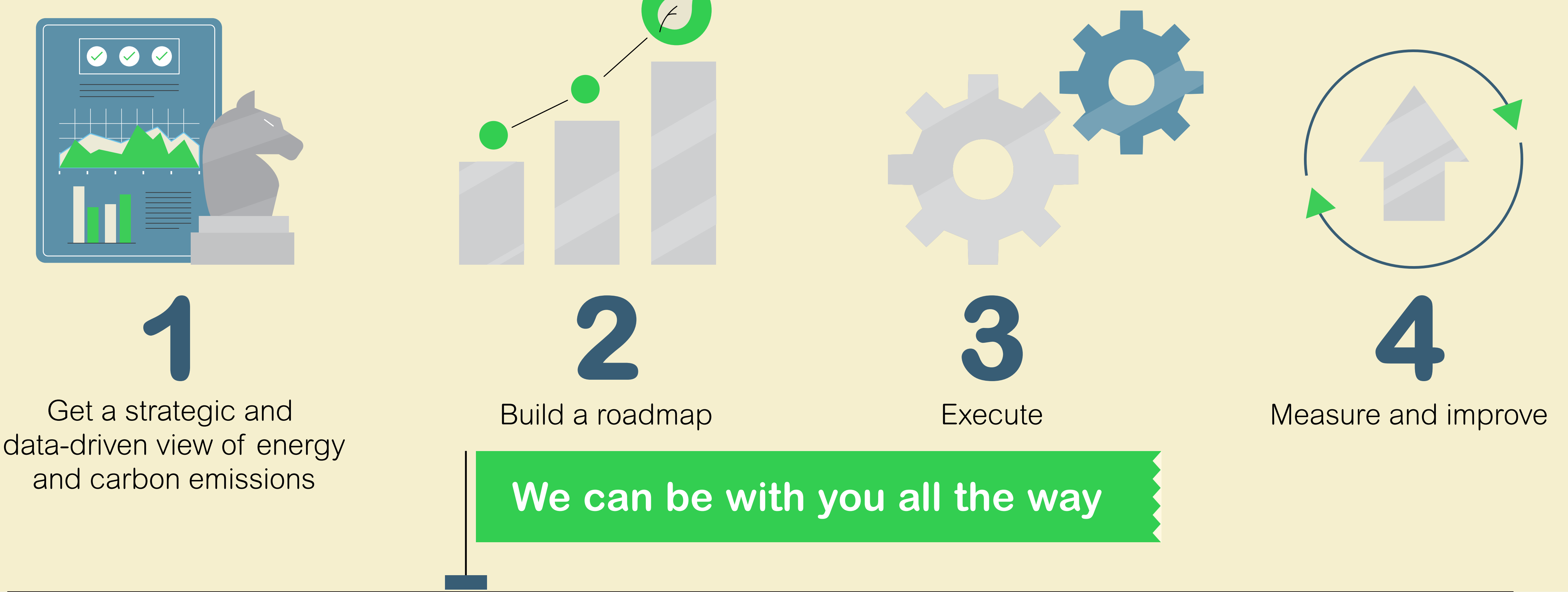
makes adding efficient insulation and solar panels easy

An essential industry looking into climate control



A step-by-step sustainability strategy toward green steel

Where do I start?



Companies already on the path toward green steel

Evolutionary approaches

- Current assets efficiency
 - » Energy efficiency
38% energy gain through modernization and consumption remote monitoring at ArcelorMittal Fos-sur-Mer unit.
 - » Process efficiency
6.7MT of steel produced sustainably every year at ArcelorMittal Dunkirk plant, with a process automation upgrade that reduces dust while improving steel quality.
- New infrastructure
 - » Balanced energy mix
300,000 CO₂ per year reduced through renewable energy at BlueScope, equivalent to 900,000 cars off the road.

Revolutionary approaches

- Redefining processes
 - » Zero-carbon process
~50% the forecasted CO₂ emissions reduction.⁴
- New steelmaking processes are critical, but there is no single right answer:
 - Innovative blast furnace concepts
 - Carbon Capture and Utilization (CCUS)
 - Biofuel
 - Hydrogen/DRI/EAFF
 - Electrification of process
- 95% emissions reduction potential through hydrogen technology.⁵

More efficient use of energy and materials can help but will not be sufficient. An evolutionary to revolutionary approach can help to decarbonize the steel business.

As the most **sustainable corporation in the world**, Schneider Electric is on a mission to make Industries of the Future eco-efficient, agile, and resilient, driving them on a step-by-step sustainability journey.

Source:

- 1 worldsteel.org
- 2 IEC
- 3 IEA
- 4 twoplanetsteel.com
- 5 Bloomberg and Tenova

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