0:01

Meet Mr Ali

0:04

and Mr Lobo

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They are working to reduce carbon dioxide

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or CO₂ emissions from steel

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by using solar power technology.

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Because while steel makes our modern world

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Forks and spoons, pans and pylons, planes and trains, lifts and towers.

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The iron and steel industry emits

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around 7% of all carbon dioxide emissions globally.

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So, to help, Shell is offering customers along the steel production chain

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like Al Tamman Indsil Ferrochrome in Oman, innovative ways to cut their emissions.

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We have reduced our total CO₂ emissions by around a quarter,

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or 90,000 tonnes per year.

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That’s the same as the annual emissions from about 40,000 cars.

1:04

This is Mr Lobo of Al Tamman Indsil

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Oman’s biggest ferrochrome producer.

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We are a small vital part of the global steel production.

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His plant produces the alloy, ferrochrome, which makes stainless steel…well, stainless and shiny.

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But extracting ferrochrome is an energy and carbon intensive business.

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We have to smelt this ore at temperatures of around 2800 degrees centigrade.

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That’s hotter than volcanic lava!

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Producing this heat requires huge amounts of electricity.

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It used to be that we only used electricity from gas-fired power stations

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which generated carbon dioxide. This is where Shell has been able to help us.

2:00

Enter Mr Ali, Oman Shell’s Business Development Manager.

2:05

Renewable energies offer huge potential to reduce emissions.

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He’s on a quest to help reduce carbon dioxide emissions from Omani industry using solar power technology.

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Here in Oman, where we have year-round sunshine

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it makes perfect sense to use the sun to generate renewable electricity.

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This is electricity generated with fewer CO₂ emissions.

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And fortunately, in Oman there’s lots of suitable land for solar panels.

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We have 88,000 solar panels in an area equal to 500,000 metres squared.

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This adds up to a 25 MegaWatt capacity, from an area roughly the size of 100 football fields.

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All these systems are computer controlled, improving the efficiency and

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Increasing the output of the plant by tracking the sunlight across the sky.

3:06

And here’s how the technology works

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When sunlight hits the surface of the solar panels, it dislodges electrons in the panels

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which are converted into electricity

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This electricity then flows along underground cables to the ferrochrome plant 3.5 km away

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We supply more than 70 gigawatt hours of renewable electricity per year

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So, using Mr Ali’s solar power has helped Mr Lobo’s ferrochrome plant

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reduce CO₂ emissions by around a quarter

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This is just one way to help the world

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move towards its climate goals while keeping the global economy turning