How it works: Carbon Capture and Storage

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global demand for energy is increasing and the challenge is to meet this demand

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while reducing our carbon footprint part of shell solution involves carbon

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capture and storage and that's why we built quest at our Scotford upgrader the

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upgrader turns thick heavy oil from the oil sands bitumen into synthetic crude

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that can then be refined into everyday products like gasoline and jet fuel cell

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uses hydrogen to upgrade the bedroom into a lighter oil but making hydrogen

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creates carbon dioxide or co2 West captures the co2 from the upgraders

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hydrogen manufacturing plants with a product called that absorbs co2 the co2

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is then separated from the end and pressurized turn the co2 gas into a

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liquid they can be transported by pipeline 65 kilometers north three well

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sides at the well the liquid co2 is injected more than two kilometres

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underground into a layer of rock filled with interconnected pores the co2

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becomes trapped within the pores and locked in under many layers of solid

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watertight rock constant monitoring both above and below ground make sure the CEO

**1:04**

**to stay safely and permanently employees West is on track to capture and store**

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over one million tonnes of co2 every year that's equivalent to the emissions

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from about two hundred and fifty thousand cars we know that up here

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carbon dioxide is a big problem but we believe deep down there lies an

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important part of the solution