

B E L L O N A P R E S E N T S

101 SOLUTIONS

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#50 PUT THE FOSSILS BACK!

101



CO₂ STORAGE Over the coming years, billions of tonnes of CO₂ will be captured from major factories and power stations. But what shall we do with it? Let's put it back where it came from.

During the 1990s, the Norwegian oil company Statoil and partners developed a process for capturing CO₂ from the Sleipner field offshore. They had to go for 100% of the CO₂. The secret is having gas wells around the world. CO₂ is injected and released into the atmosphere. However, the Sleipner development was a gas cap close to the North Sea, being, by the first instance in the world, introduced a bar on CO₂. This gave Statoil the incentive to track carefully.

Several engineers discovered that by injecting CO₂ down into the 4000-metre-deep oil sea formation they could gain rid of the CO₂ and extract the water they needed to inject into the oil fields to increase the pressure, which at the same time would force the oil to the surface. These tests with one stream (Slørø) a million tonnes of CO₂ a year have been repeated for the Svalbard formation, so confidence has confirmed that this technique is sound. The Sleipner CO₂ has not only as expected and contained in the reservoir. The Statoil formation in the North Sea consists of a long layer of sandstone and has the capacity to store millions of tonnes of CO₂. In other words, it provides safe storage space in the continents.

#57 THE ALUMINIUM OF THE FUTURE



EFFICIENT PRODUCTION Efficient production of aluminum is amongst the world's most important industries. Production has doubled in the last 20 years and it is expected that this will double again. Since it is a melting, light and strong, it is used in everything from mobile phones and laptops to cars, boats and aircraft. The aluminium industry has high energy demands, which in most countries is supplied by polluting coal and gas-fired power stations. The technology of electrolysis produces aluminium from alumina, a purified form of aluminium oxide. It is a very energy-intensive process. The most efficient aluminium factories use only a third as much electricity as other plants, and new technology is being developed and implemented. Another important addition is to ensure that as much aluminium as possible is recycled at the moment every 10 percent is lost. Production of aluminium is an energy-intensive industry. It is one of the most energy-intensive production lines in the world.

#61 LAUGHING GAS IS NOT SO FUNNY

CLEANER FERTILISER PRODUCTION Laughing gas is not so funny in fact, N₂O, which is a powerful greenhouse gas, is used in the production of fertilizers. The most efficient production of laughing gas is not so funny in fact, N₂O, which is a powerful greenhouse gas, is used in the production of fertilizers. The most efficient production of laughing gas is not so funny in fact, N₂O, which is a powerful greenhouse gas, is used in the production of fertilizers.

#62 USE SURPLUS HEAT

There are many ways to use surplus heat. One way is to use it to generate electricity. Another way is to use it to heat buildings. A third way is to use it to heat water for industrial processes. A fourth way is to use it to heat water for domestic use. A fifth way is to use it to heat water for agricultural use. A sixth way is to use it to heat water for aquaculture. A seventh way is to use it to heat water for aquaculture. A eighth way is to use it to heat water for aquaculture. A ninth way is to use it to heat water for aquaculture. A tenth way is to use it to heat water for aquaculture.

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SOLUTION CATEGORIES

KEYWORDS



THE QUIZ:

How much do you really know about the environment?

- Renewable Energy** (27)
- Sahara Forest Project** (3)
- Transport** (19)
- CCS: What a Catch!** (6)
- Industry** (13)
- Build for the Future** (13)
- Gold in Green Forests** (11)
- Political** (9)

101-solutions (89), Renewable energy (23), transport (17), Build for the Future (13), industrial revolution (12), industrial (12), industry (12), Gold in Green Forests (11), CCS (6), CCS - What a Catch (5), Sahara Forest Project (3), www.saharaforestproject.com (3), Driving with daisies (2), Green white goods (1), Control systems for electricity (1), Replace appliances and electronic items (1), Control Freaks (1), Stay out of the cold (1)

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..... PRESENTING **ALL** SOLUTIONS

THE QUIZ:

How much do you really know about the environment?

7



**THE ANSWER IS BLOWING
IN THE WIND**

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Future (13), industrial revolution
2), industry (12), Gold in Green Forests
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Replace appliances and electronic items
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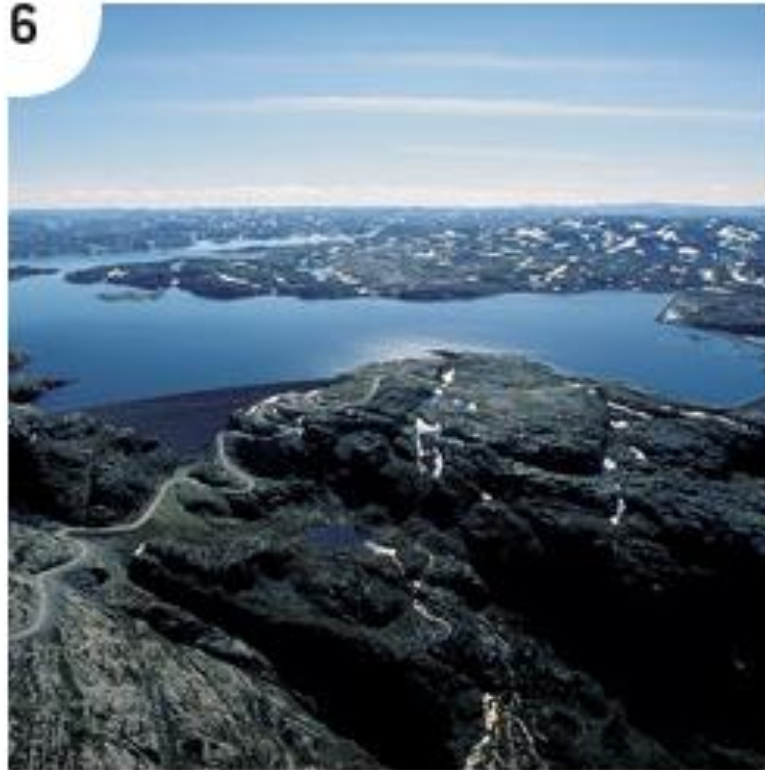


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"We can't solve problems by using the same kind of thinking we used when we created them."

Albert Einstein

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EUROPE'S GREEN BATTERY



renewable energy (23), transport (13), industrial revolution (12), Gold in Green Forests at a Catch (5), Sahara Forest project.com (3), Driving white goods (1), Control systems for appliances and electronic items (1), Stay out of the cold (1)

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THE QUIZ:

How much do you really know about the environment?



11



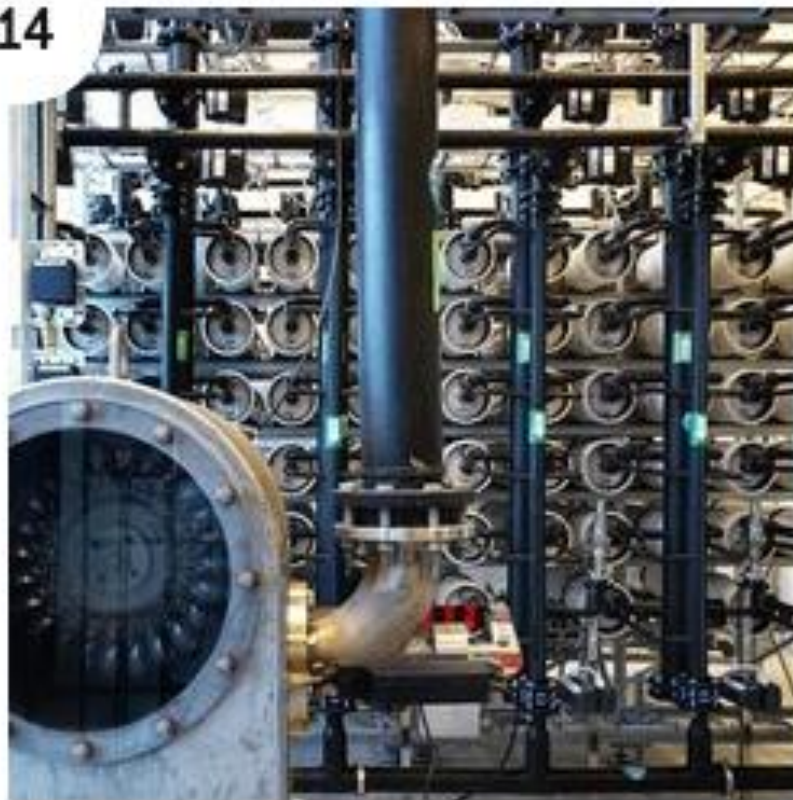
MAKING BUSINESS

12



THE SUN IN SEVILLE

14



ELECTRICITY FROM SALT WATER



able energy (23), transport (3), industrial revolution (12), Gold in Green Forests (5), Sahara Forest Project (3), Driving the goods (1), Control systems for appliances and electronic items (1) out of the cold (1)

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THE QUIZ:

How much do you really know about the environment?



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POWER IN THE EBB AND FLOW

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CATCH

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"We can't solve problems by using the same kind of thinking we used when we created them."

Albert Einstein



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ENERGY MANAGEMENT: UNLEASH THE ENERGY



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CLEAN DEVELOPMENT MECHANISM



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PULL LIMIT



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62



USE SURPLUS HEAT

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RE-CHARGE YOUR BATTERIES



renewable energy (23), transport (13), industrial revolution (12), Gold in Green Forests at a Catch (5), Sahara Forest forestproject.com (3), Driving white goods (1), Control systems appliances and electronic items stay out of the cold (1)

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CULTURE GREEN
FRESH



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WANTED: LEADERS WITH COURAGE



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