Financial Times in the News: Desalination

Royal Geographical Society

with IBG

Advancing geography and geographical learning



Theme and Specification link

This resource explores how a growing number of countries are turning to desalination as an option to manage water stress.

The link to the article can be found here: https://bit.ly/47qvpFk or use the QR code in the top right corner of this page.

This article underpins many aspects of energy security within the A Level Specifications specifically:

AQA

- 3.2.5.2 Natural resource issues
- 3.2.5.3 Water security
- 3.2.5.6 Resource futures
- 3.2.5.7 Case studies

Edexcel

- 5.7 There are physical causes and human causes of water insecurity.
- 5.8 There are consequences and risks associated with water insecurity.
- 5.9(a) There are different approaches to managing water supply, some more sustainable than others.

EDUQAS & (WJEC)

- (3) 2.1.5 Deficit within the water cycle.
- (3) 2.2.9 Managing marine environments.
- (3) 2.2.10 Managing ocean pollution.

OCR

- 2.a. Humans have influenced the climate system, leading to a new epoch, the Anthropocene.
- 3.a. Human factors can disturb and enhance the natural processes and stores in the water and carbon cycles

| Key | terms | | _ |
|-----|-------|--|---|
|-----|-------|--|---|

Use the article and your own knowledge to define the key terms below:

Brine

Climate change

Desalination

Reverse osmosis desalination

Thermal desalination

Water stress

Summary in numbers

€400mn



Find the related statistic in the article and develop it to add context and summarise the report.

| \$63mn | Wider issu |
|--------|--|
| 800km | Write a que think about might influe article. |
| 12% | |
| 86% | |
| 150mn | |
| 2030 | |
| 1951 | |
| \$20bn | |
| 21.7% | |
| 2024 | |
| 70% | |
| 97% | |
| 18% | |

es

estion here to help other issues which ence the points in the

| Case study = | | |
|---|--|--|
| The Barka IV Desalination plant is the biggest of its kind in Oman. Create a short case study on this plant highlighting the opportunities and challenges faced for a desalination plant. | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Synoptic links



Note down any synoptic links using your specification to help you. A Mind map might be helpful here.

Desalination

5 examination style questions



Water stress is a global issue. Discuss.

Explain the process of reverse osmosis desalination.

Analyse the pattern of water stress using the baseline water stress map.

Explain the limitations of reverse osmosis desalination.

Assess the view that desalination is only viable if a country has the funds to pay for it.