



National
Qualifications
2023 MODIFIED

X833/76/12

**Geography
Global Issues and
Geographical Skills**

TUESDAY, 25 APRIL

11:20 AM — 12:10 PM

Total marks — 40

SECTION 1 — GLOBAL ISSUES — 20 marks

Attempt **ONE** question.

SECTION 2 — APPLICATION OF GEOGRAPHICAL SKILLS — 20 marks

Attempt the question.

You will receive credit for appropriately labelled sketch maps and diagrams.

Write your answers clearly in the answer booklet provided. In the answer booklet you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not, you may lose all the marks for this paper.



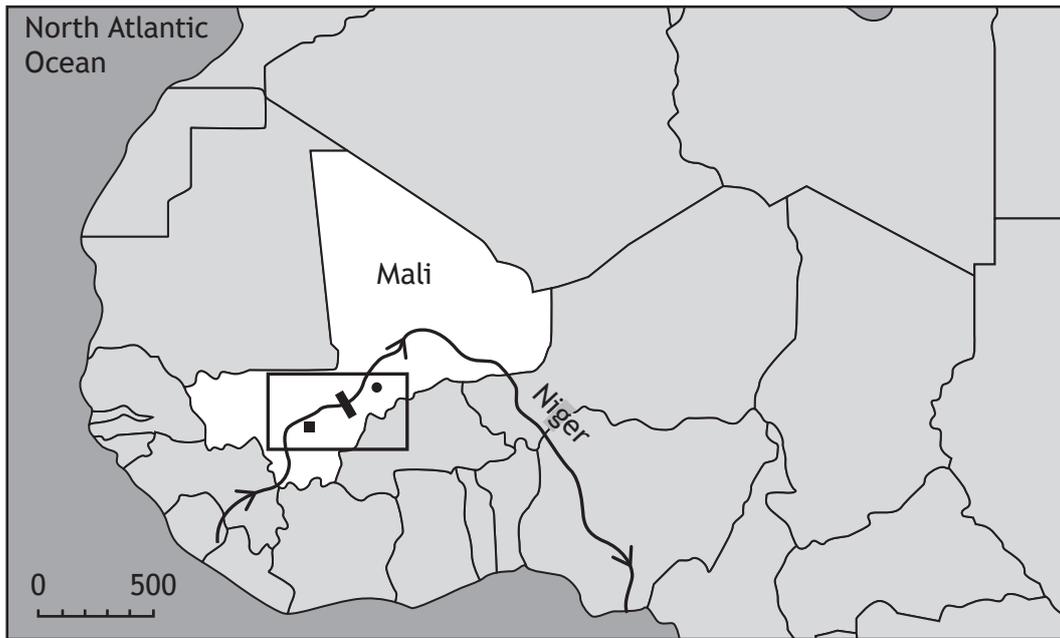
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SECTION 1 — GLOBAL ISSUES — 20 marks

Attempt ONE question

Question 1 — River basin management

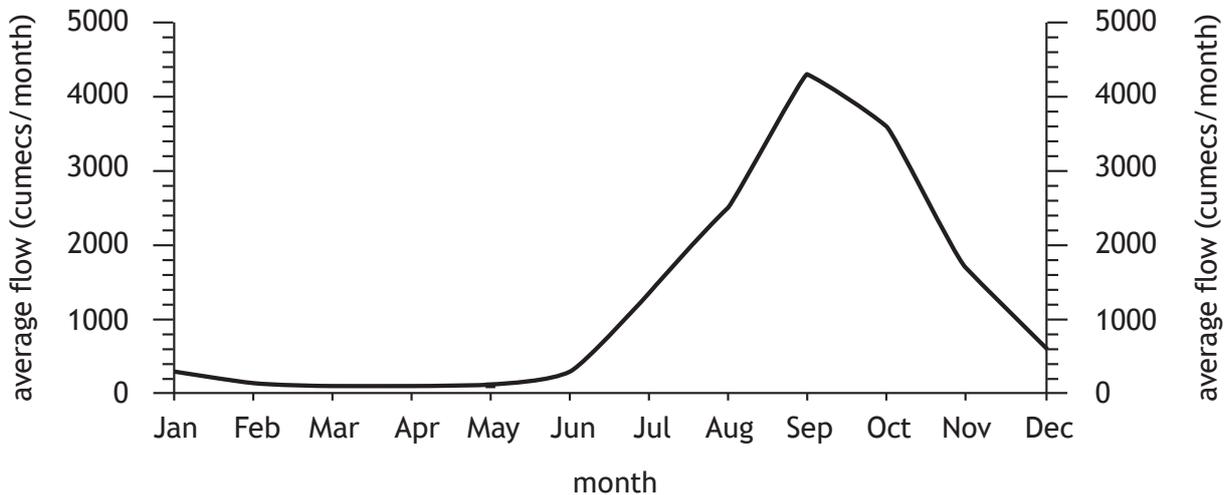
Diagram Q1A Niger River Basin, Mali and location of the Markala Dam



Key

- | | | | |
|---|-----------------------------------|---|-------------------------|
| → | River Niger and direction of flow | ■ | Markala dam |
| ■ | Bamako (Capital City) | ● | Climate Station (Mopti) |

Diagram Q1B Niger River average monthly flow, near site of dam



Question 1 (continued)

Diagram Q1C Climate graph for Mopti, Mali

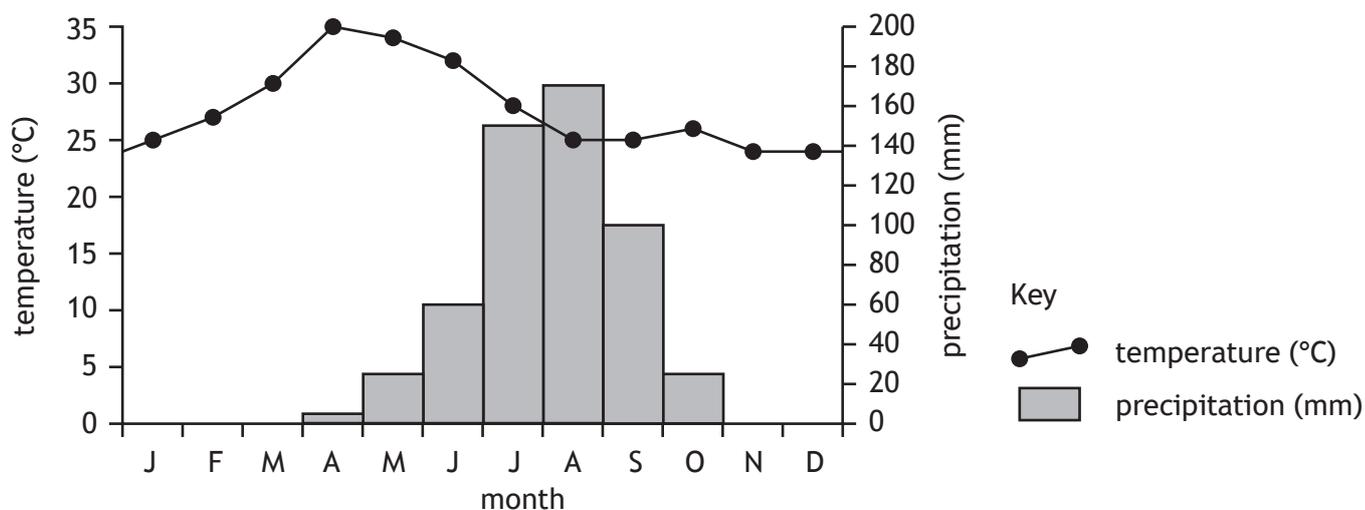


Diagram Q1D Population growth in Mali

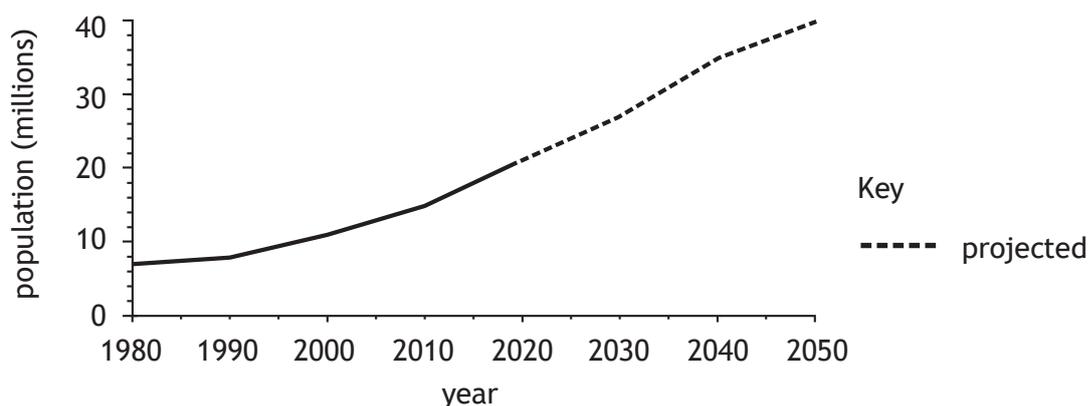


Diagram Q1E Selected statistics, Mali

Population with access to improved drinking water	80%
Population with access to improved sanitation	39%
Population with access to electricity	51%
Population employed in agriculture	62%

(a) Study Diagrams Q1A, Q1B, Q1C, Q1D and Q1E.

Explain why there is a need for water management in the Niger River Basin, Mali.

10

(b) **Discuss** the **negative** socio-economic and environmental consequences of a named river management project that you have studied.

10

[Turn over

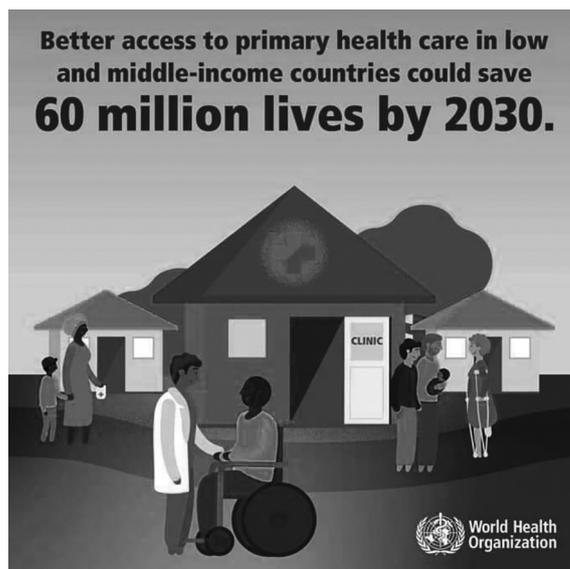
Question 2 — Development and health

- (a) Water-related diseases such as malaria have many impacts on the development of a country.

Referring to malaria, or any other water-related disease you have studied, **discuss** the impacts on people and the economy.

6

Diagram Q2 WHO social media campaign



- (b) Look at Diagram Q2.

Referring to specific primary health care strategies that you have studied:

- (i) **Describe** these strategies, and
- (ii) **comment on** their effectiveness in meeting the health care needs in developing countries.

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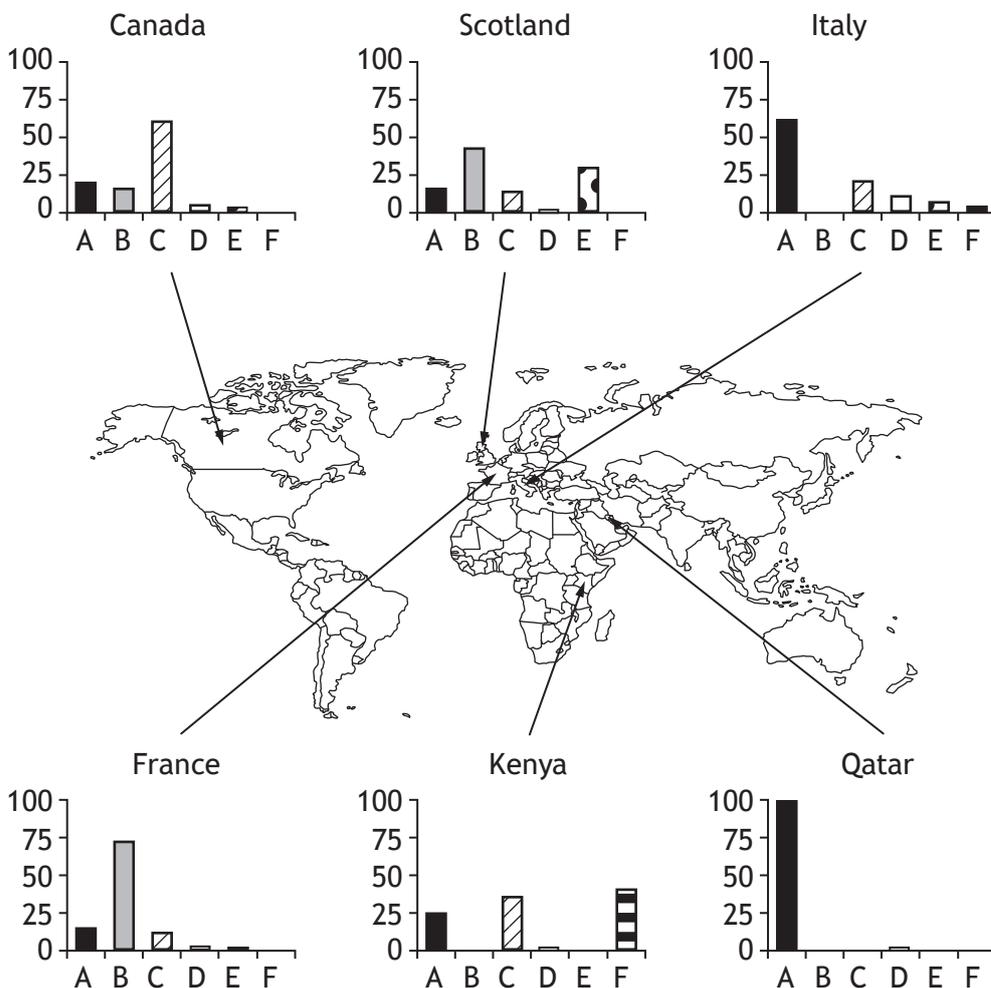
Question 3 — Global climate change

- (a) **Explain** the physical causes of climate change. 8
- (b) Many strategies have been implemented to both reduce greenhouse gas emissions and to manage the effects of climate change.
- (i) **Describe** strategies you have studied and
- (ii) **comment on** their effectiveness. 12

[Turn over

Question 4 — Energy

Diagram Q4A Sources of energy production for selected countries



Key

- A fossil fuels (oil, gas and coal)
- B nuclear
- C hydroelectric power (HEP)
- D solar power
- E wind power
- F geothermal power

(a) Look at Diagram Q4A

Suggest reasons for the different methods of energy production around the world.

You may wish to refer to countries you have studied.

Question 4 (continued)

Diagram Q4B Floating tidal turbine



(b) Look at Diagram Q4B.

Work has started in Scotland to build what is described as the world's most powerful floating tidal turbine.

Comment on the effectiveness of tidal power, or any other renewable source of energy you have studied, in meeting the energy demands of a country.

12

[Turn over

Attempt the question

Question 5

There is a proposal to build a new 1500-home village called Tresham Garden Village, on the site of the former Deenthorpe airfield on the outskirts of Corby.

The proposal includes:

- a nursery, primary and secondary school
- 200 houses for retired people and the remaining 1300 homes, a mixture of private and rented homes with between one and five bedrooms
- 80% of energy for Tresham Garden Village will be generated from renewable and low carbon sources
- new cycle routes; an electric shuttle bus service
- a skills and training centre; a hotel and a community hall
- a large Forestry Commission tree planting scheme.

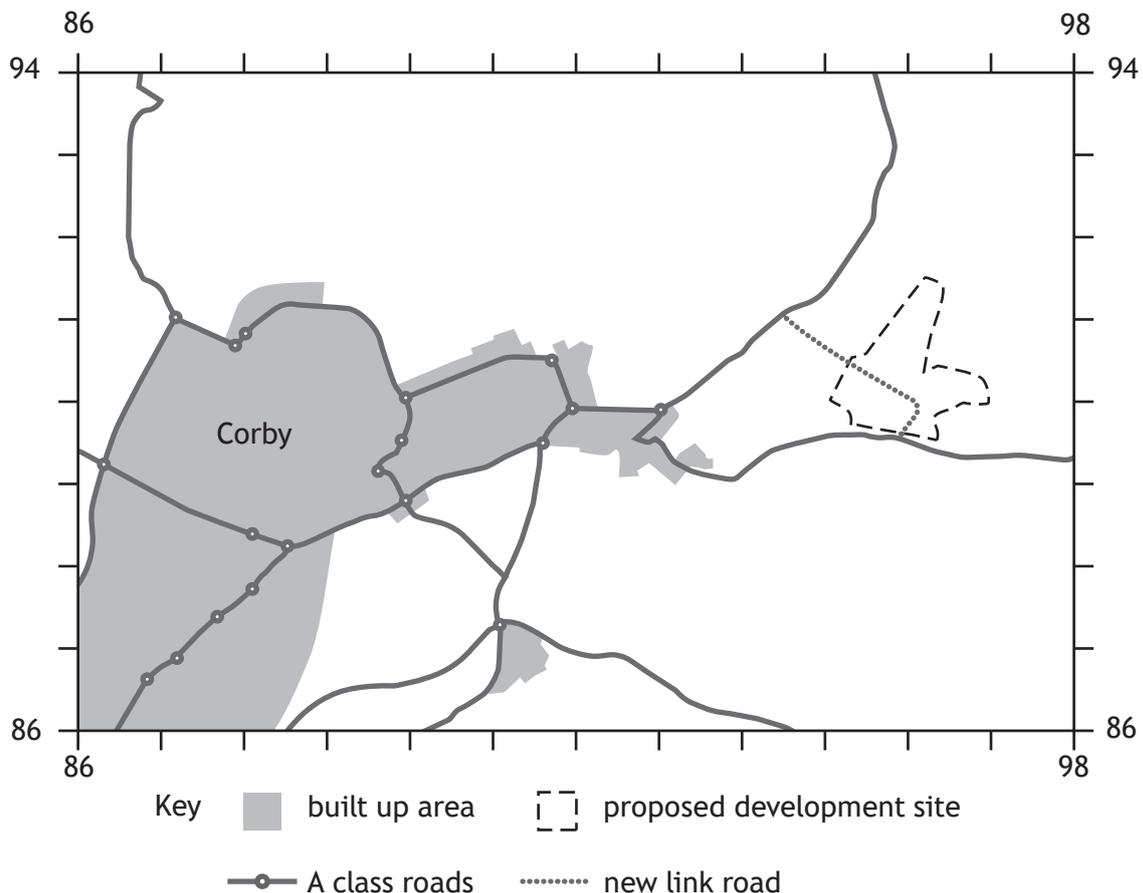
Study the Ordnance Survey map extract of the Corby area and Diagrams Q5A, Q5B, Q5C, and Q5D before answering this question.

Referring to evidence from the OS map extract, and information from the other sources, discuss:

- the advantages and disadvantages of the proposed Tresham Garden Village site, and
- any possible social, economic or environmental impacts this development may have on the surrounding area.

20

Diagram Q5A Sketch Map



Question 5 (continued)

Diagram Q5B Average peak hourly traffic flow

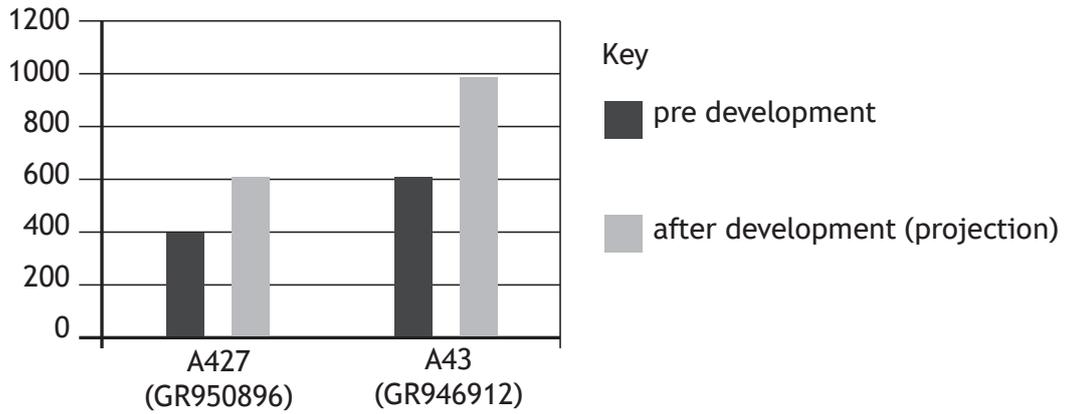


Diagram Q5C Population of Corby

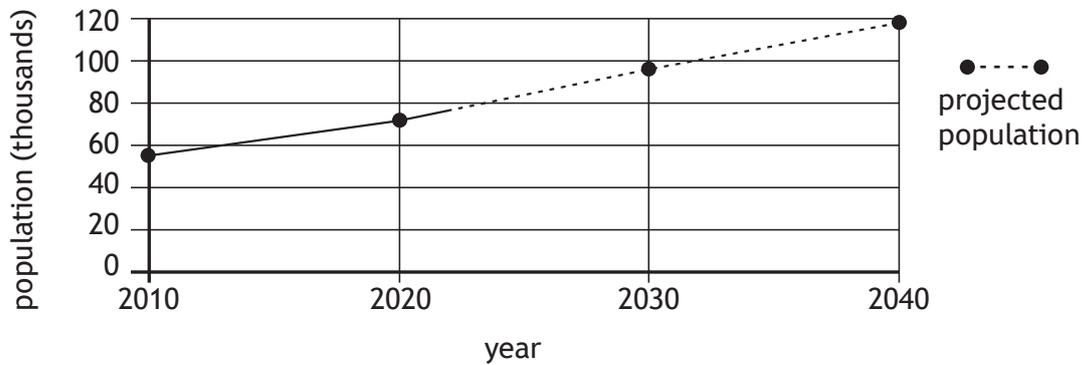
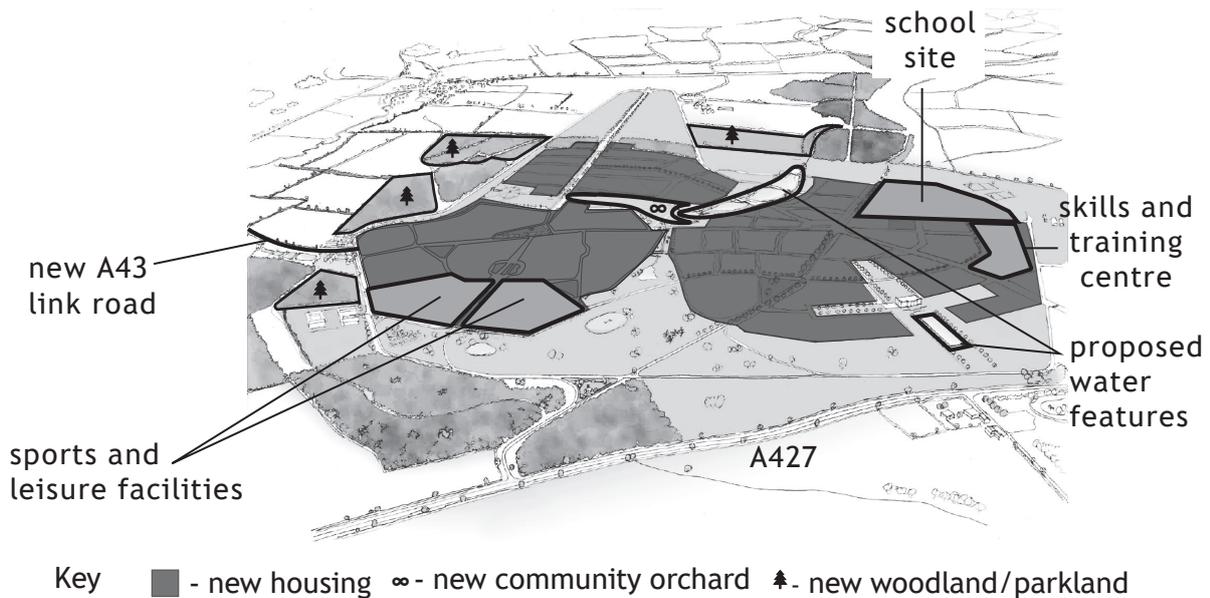


Diagram Q5D Artist's impression looking north from GR 955893



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Diagram Q2 WHO Social media campaign

Diagram Q4B Image of 'Orbital 02 2MW tidal turbine' is taken from <https://www.oceanenergy-europe.eu/industry-news/orbital-marine-power-unveils-orbitalo2-2mw-turbine-design/>. Reproduced by kind permission of Orbital Marine Power.