

Global Citizenship – An Interdisciplinary Approach in Primary School @NUthmani



Science & Renewable Energy

Focus on the development of sustainable cities by the use of renewable energies.

- *Learning context:*
 - *Understanding the differences between renewable and non-renewable energy.*
 - *Consider the use of solar power in your local setting and then study the Sustainable city of Dubai.*
 - *Consider the similarities and differences with Dubai that make the sustainable city so successful.*
 - *Using your knowledge design your own sustainable community.*
 - *<https://www.thesustainablecity.ae/>*
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THE FIRST OPERATIONAL NET ZERO ENERGY CITY IN DUBAI,
MODELED TO BECOME AN INTERNATIONAL SHOWCASE FOR
HIGH QUALITY SUSTAINABLE LIVING

Focus: Science/Renewable Energy

Stage: Second Level

Mathematics

I can draw 2D shapes and make representations of 3D objects using an appropriate range of methods and efficient use of resources. **MTH 2-16c**

Having explored a range of 3D objects and 2D shapes, I can use mathematical language to describe their properties, and through investigation can discuss where and why particular shapes are used in the environment. **MTH 2-16a**

Literacy

I can show my understanding of what I listen to or watch by responding to literal, inferential, evaluative and other types of questions, and by asking different kinds of questions of my own. **LIT 2-07a**

By considering the type of text I am creating, I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience. **LIT 2-26a**

Science

I can investigate the use and development of renewable and sustainable energy to gain an awareness of their growing importance in Scotland or beyond. **TCH 2-02b**

By considering examples where energy is conserved, I can identify the energy source, how it is transferred and ways of reducing wasted energy. **SCN 2-04a**

Expressive Arts

Through observing and recording from my experiences across the curriculum, I can create images and objects which show my awareness and recognition of detail. **EXA 2-04a**

@GCEducationScot

Learning Context

Science: Renewable Energy

Global Citizenship Focus: Sustainability

ICT and Technologies

I can investigate the use and development of renewable and sustainable energy to gain an awareness of their growing importance in Scotland or beyond. **TCH 2-02b**

Through discovery and imagination, I can develop and use problem-solving strategies to construct models. **TCH 2-14a**

Social Studies

I can consider the advantages and disadvantages of a proposed land use development and discuss the impact this may have on the community. **SOC 2-08b**

I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally responsible way. **SOC 2-08a**

Health and Wellbeing

I am investigating different careers/occupations, ways of working, and learning and training paths. I am gaining experience that helps me recognise the relevance of my learning, skills and interests to my future life. **HWB 2-20a**

Sustainable Development Goals

SDG 11: Sustainable Cities and Communities
SDG 7: Clean Energy

Focus for Assessment

SAY: Identify the similarities and differences in the challenges faced by Dubai & Glasgow, in setting up a sustainable community.

MAKE: Design and construct your own model of a sustainable city.

WRITE: Make a poster explaining the process of how solar power works to create energy, including diagrams and appropriate vocabulary.

DO: Work collaboratively in a small group to plan and construct a 3D model of a sustainable city, identifying the relevant aspects of sustainability.