





THEME ALLOCATED:	360 minutes
LEVEL:	Energy
TITLE OF	Giving good use of our energy
THE WEBQUEST:	
INTRODUCTION:	

INTRODUCTION:

Energy is a key aspect of life as we know it and it plays a key role also in countries' development. More and more, we all need to use energy efficiently to ensure sustainable societies.

It is important to be aware that our individual attitude maters when we talk about energy consumption. And there are plenty of issues directly related to it, from the choices we make at home or the means of transport we use, or even at school or when we go to gym. If we analyse our daily life, we may found several behaviours that we may change in order to get a more efficient use of energy and therefore, a more sustainable planet.

Let's give good use of our energy?

TASKS:

In order to adopt an efficient energy consumption, preserving non-renewable resources, you should select information about the relationship between energy consumption and global warming and explore the connection between carbon dioxide production and energy consumption, reflecting about the advantages of biomass energy production and analysing different sources of biomass fuel.

Aiming the goal of persuading both, your family and your friends and schoolmates, to an efficient energy consumption at home and at school or leisure times, you should outline top energy saving products in each context and compare different approaches regarding energy saving.

With the objective of promoting a sustainable community, you will need to search for information about energy efficiency and sustainability and then identify the role of energy in sustainable development.

To promote the use of circular economy principles in your family, you will need to relate energy conservation and circular economy and analyse how circular economy can contribute for the energy transition.

To create awareness of trends in energy savings in your family, you will need to select





trends in energy savings and compile the advantages of some of the energy savings trends. To promote smart city innovations regarding energy efficiency, you will create a communication plan and previously, you will reflect about energy saving and smart cities and analyse how smart city innovations can be related to energy efficiency.

PROCESS:

Step 1- Commit to an efficient energy consumption in everyday life, promoting the preservation of non-renewable resources

Try to establish relationship between energy consumption and global warming and the connection between carbon dioxide production and energy consumption, and to identify the advantages of biomass energy production and different sources of biomass fuel. Afterwards, you should sum up your conclusions to discuss with your family, using a poster, a presentation or any other form you prefer that suits your goal, outlining the importance of an efficient energy consumption in everyday life and the preserving of non-renewable resources, namely what alternatives people may use to do it.

Step 2 - Persuade to an efficient energy consumption, both at home by your family and at school or in leisure activities

Now, outline top energy saving products at home and school and compare different approaches regarding energy saving in each context. In order to motivate your family and your friends or schoolmates to an efficient energy consumption in their daily life, create an advertisement campaign — it may be a film, poster, article, etc. - to an online platform (online journal, social media...). You should define what kind of materials suits best your target and your goal.

Step 3 - Promote a sustainable community

Search for information about energy efficiency and sustainability and identify the role of energy in sustainable development. Then, you should create a post for a social media promoting an attitude leading to a more sustainable society. Your target is the people who live close to you (your neighbourhood, town, etc.) and you will need to select what social media is the best mean to reach them.

Step 4 - Promote circular economy principles in your family

How you can relate energy conservation and circular economy? Read about it and analyse how circular economy can contribute for the energy transition. To promote circular economy principles within in your family, create a plan identifying some actions you all may adopt regarding circular economy, laying emphasis on the advantages that will benefit you as a family, as also society in general.





Step 5 - Create awareness of trends in energy savings in your family

Select trends in energy savings and compile the advantages. Then, you should create a film or a poster to present your family identifying different scenarios describing what the near future may be in terms of energy consumption, in a wider perspective, including subjects such as mobility.

Step 6 - Create a communication plan to promote smart city innovations regarding energy efficiency

Finally, search for energy saving and smart cities and analyse how smart city innovations can be related to energy efficiency. Then, you should create a communication plan to promote smart city innovations regarding energy efficiency, in which we need to identify who will be your target, the means you need to use to reach that target, when you would communicate and what would be your headline advertise.

RESOURCES:

Resources for Step 1:

- Energy and climate change https://www.eea.europa.eu/signals/signals-2017/articles/energy-and-climate-change
- Global energy & CO2 status report 2019
 https://www.iea.org/reports/global-energy-co2-status-report-2019
- Biomass pros and cons
 https://www.energysage.com/about-clean-energy/biomass/pros-and-cons-biomass/
- Biomass energy
 https://www.nationalgeographic.org/encyclopedia/biomass-energy/

Resources for Step 2:

- Best smart home devices for saving money & energy <u>https://www.safety.com/smart-home-devices-saving-money-and-energy/</u>
- 14 Ways how to save energy at school <u>https://paylesspower.com/blog/how-to-save-energy-at-school/</u>
- The top 15 ways to save energy at home https://www.enercare.ca/blog/tips-tricks/top-15-ways-save-energy-home
- 11 Simple tips to creating an effective ad https://targetpublic.com/11-simple-tips-creating-effective-ad/

Resources for Step 3:

• The role and importance of energy efficiency for sustainable development of the





countries

https://www.researchgate.net/publication/324110795 The Role and Importance of Energy Efficiency for Sustainable Development of the Countries

- Energy and the sustainable development goals https://energypedia.info/wiki/Energy and the Sustainable Development Goals
- 30 Social media content ideas and examples for brands https://blog.hootsuite.com/content-idea-cheat-sheet/

Resources for Step 4:

- Circular economy, renewables & energy efficiency https://www.environmentalleader.com/2020/05/circularity-renewables-energy-efficiency/
- The great energy transition in two decades; pipedream or reality? | Pierre-Pascal Urbon | TEDxKassel

https://www.youtube.com/watch?v=8YRH31z5sXg

- Circular economy: definition & examples | sustainability environment https://www.youtube.com/watch?v=X6HDcubgxRk
- The easy guide to developing an effective action plan https://creately.com/blog/diagrams/how-to-write-an-action-plan/

Resources for Step 5:

- The simplicity of saving energy | Braden Hoefer | TEDxClearBrookHighSchool https://www.youtube.com/watch?v=7QxduqnYMw4
- 2019 Energy-efficient home design trends report https://energycentral.com/c/ee/2019-energy-efficient-home-design-trends-report
- Watch: world smart energy week opening ceremony
 https://www.smart-energy.com/industry-sectors/electric-vehicles/six-technology-trends-shaping-the-future-of-mobility/https://www.youtube.com/watch?v=ISwdIabMr9c

Resources for Step 6:

- Why smart cities are more efficient cities https://geographica.com/en/blog/smart-cities-efficient/
- Smart cities to boost energy efficiency https://smartbuildingsmagazine.com/features/smart-cities-to-boost-energy-efficiency
- How to create a communications strategy https://www.youtube.com/watch?v=zUZrua0J15o
- How to write an effective communications plan https://blog.hubspot.com/marketing/communications-plan





EVALUATION:

On completion of this WebQuest, young adults will have achieved the following learning outcomes:

Knowledge	Skills	Attitudes
 Select information about the relationship between energy consumption and global warming. Reflect about advantages of biomass energy production. Outline top energy saving products at home. Outline top energy savings products at school or in leisure activities. Search for information about energy efficiency and sustainability. Relate energy conservation and 	 Explore the connection between carbon dioxide production and energy consumption. Analyse different sources of biomass fuel. Compare different approaches regarding energy saving at home. Compare different approaches regarding energy saving at school or in leisure activities. Identify the role of energy in sustainable development. Analyse how 	 Commit to an efficient energy consumption in everyday life. Promote the preservation of non-renewable resources. Persuade your family to an efficient energy consumption at home. Persuade an efficient energy consumption at school or in leisure activities. Promote a sustainable community. Promote circular economy principles
 information about energy efficiency and sustainability. Relate energy conservation and circular economy. Select trends in 	 Identify the role of energy in sustainable development. Analyse how circular economy can contribute for 	 Promote a sustainable community. Promote circular economy principles in your family. Create awareness of
 energy savings. Reflect about energy saving and smart cities. 	the energy transition. Compile the advantages of some of the energy savings trends. Analyse how smart city innovations can be related to energy	trends in energy savings in your family. Create a communication plan to promote smart city innovations regarding energy





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As part of your self-assessment, you can consider the following questions to reflect about what you have learnt with this WebQuest:

- What did I learn about the importance of an efficient energy consumption?
- What products should I use to save energy?
- What energy has to do with circular economy?
- What is the role of energy for a sustainable development?

Questions that might be used to start a discussion with your peers, parents or teachers:

- Have you changed any ideas you used to have about renewable energy?
- What was the most relevant fact or information you took from this challenge?
- Did you change any of your habits as a result of doing this WebQuest? If so, what exactly did you change?
- What are you going to do, from now on, with the information you got from this challenge? What could it be your "next steps" regarding these subjects?

CONCLUSION:

Do you think energy is a too specific and technical subject that has little to do with you? But you have already noticed that much in your life runs using energy. That's for sure!

Energy is more than to power on and we all need to reflect about the choices we make in our daily lives.

By doing this WebQuest, you will be challenged to, not only reflect, but mostly important, identify several situations in which you can do a difference and encourage people around you, being your family or your friends, to do the same. You'll discover alternatives for today and, at the same time, perspective what the future may become regarding not only energy, but the way we live.

