

Discovering a Sustainable Mindset [SysMind]

The Four Elements – a starting point for multi-
perspectivity in education for sustainable
development

(Additional Part of Result 1)

July 2024



**Co-funded by
the European Union**

The European Commission support for the production of this publication does not constitute an endorsement of the contents, which reflects the views only of the authors, and the Commission cannot be held responsible for any use, which may be made of the information contained therein

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Introduction

Working steps

At the beginning of the working process on Result 1, the project partners agreed on four reference points as starting points for their research and collection:

-  Fire (heating, energy)
-  Earth (erosion, waste)
-  Water (droughts)
-  Air (Air pollution, Oxygen, CO2)

These four elements are excellent starting points as they have different connotations in the different partners' countries due to e.g. religion, culture and climatic conditions. Focusing on the elements already revealed the multi-perspectivity of the individual topics. As a first step, all partners gave a short information (and personal estimation) regarding elements and their valuation/management in their specific countries (see Chapter 1). This political and social information was included as a potential base for discussions or developing ideas for own teaching materials. It also helps to understand the different approaches, attitudes and management of the different countries regarding the elements and connected issues.

The collection of links, approaches, methods and materials was afterwards started and, contrary to the original plan, will be continued, becoming an up-to-date supporting document to the MOOC (Result 3).

Valuation of the four elements and their use in the partners' countries

Background of the templates

The SysMind project tends an arc between collection of data, materials and tools describing and reflecting different cultural and religious accesses towards the topics of: environmental protection, sustainability, agriculture, forestry, horticulture, home economics, green care, etc.

In the first place, four topics were defined – Fire, Heating, Energy | Air, Air pollution, Oxygen, CO2 | Earth, Erosion, Waste | Water, Droughts – which are part of any chosen fields for sustainability (agriculture, home economics, horticulture...).

The first brainstorming on the padlet gave an idea of the amplitude of aspects contained.

The results from this data collection can then be used as a base for sustainable vocational training and education in culturally blended groups (Results 2 and 3).

The attached templates reflect, explain or illustrate how the attitude in the project partners' culture/religion is towards these four topics or how they personally experience it.

Element 1 – fire (heating, energy)

UCAEP (Austria)

Source 1 Fire:

Description (in Engl.): Existing material, documents, methods, videos, etc.:

Describe the special features of the country here - work out the USP

In Austria, heating in winter is important. Since we have a lot of single family houses, central heating is a big environmental issue. Many houses are still heated with oil or gas. Convenience and the low price of these heating systems play a major role here. Most of the natural gas comes from Russia. Just in the last years Austria made itself very dependent with it.

For this reason, a changeover to wood heating systems is being pushed at the moment. Here it is to be considered however that despite the forest wealth of Austria a strong forestry is necessary. Often, therefore, monocultures, mostly spruce, have been planted in recent decades to meet the increasing demand for wood.

The fine dust pollution resulting from central heating systems is a major environmental problem in Austria.

Fire also has cultural and religious significance in Austria. In Salzburg and Tyrol, large solstice fires are burned for tourists.

"The night when the mountains burn" <https://www.tirol.at/blog/b-kulturleben/sonnwendfeuer-in-tirol>

Religiously, the Easter fire is an important event for Christians in Austria. Here, a ritual fire is burned in front of the church on Easter night before the beginning of the resurrection celebration to light the Easter candle.

Source 1 Fire:

Description (in Engl.): Existing material, documents, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Energy is at the heart of sustainable development and poverty reduction efforts. It affects all aspects of development - social, economic and environmental - including livelihoods, access to water, agricultural productivity, health, population, education and gender.

Access to sustainable sources of clean, secure and affordable energy has a huge impact on a number of aspects of human development; this applies not only to physical infrastructure (such as electricity networks) but also to energy availability, reliability and commercial viability. In practice, this means that energy services are provided to households and businesses in line with consumer solvency.

Today, more than 75 percent of the energy consumed comes from burning fossil fuels, which cause climate change.

About 72% of electricity in South Africa, 70% in India and 49% in the United States comes from coal-fired power plants. But it is known that burning coal, like other fossil fuels, accounts for about 70% of the planet's greenhouse gas emissions¹.

Latvia in the form of energy or primary energy resources imports about 2/3 of its energy needs and 1/3 produces from its own renewable energy sources, mainly hydro resources².

From 2023, it will be prohibited to install new individual and local heating equipment using liquid fuel, including diesel fuel, in Riga.

In turn, from 2025, it will be prohibited to install new individual and local heating equipment in Riga that uses any type of fossil fuel³.

Source 2 Fire:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

The report "Long-term Strategy for the Renewal of Buildings", prepared by the Ministry of Economics, states that Latvia's housing stock consists of 38.6 thousand buildings with a total area of 54.4 million square metres, most of which were built before 1993, which means that they need investment to improve both their energy efficiency and their technical condition.

According to the experts' assessment, 70% of the Latvian building sector can be renovated in a cost-effective way, which would be about 27 thousand apartment buildings with a total area of 38 million square metres⁴.

In total, about 4.5% of all apartment buildings have received support from EU funds under the Multi-apartment Building Insulation Programme. There is a need to significantly increase the uptake of available insulation programmes. More than €160 million is earmarked for this purpose over the next 7 years to ensure that the existing housing stock meets high energy efficiency and safety standards⁵.

Notes: The low number of insulated houses is not only due to the need for co-payments, but also to people's mindset - let someone else take care of it (post-Soviet mindset).

¹ <https://lapas.lv/lv/attistibas-politika/post-2015/globalizacijas-socialie-aspekt/ilgtspejiga-energjia/>

² <https://lapas.lv/wp-content/uploads/2012/02/fact-sheet-tira-energjia-LV.pdf>

³ <https://www.la.lv/riga-apkures-vajadzibam-planots-aizliegt-akmenoglu-izmantosanu>

⁴ <https://www.em.gov.lv/lv/jaunums/valdiba-apstiprina-jaunu-atbalsta-programmu-daudzdzivoklu-eku-remontiem-un-apkart-esosas-teritorijas-labiekartosana>

⁵ <https://lvportals.lv/dienaskartiba/323249-altum-daudzdzivoklu-maju-renovacijas-programmai-papildus-iesniegts-101-projekts-kopuma-tiks-atjaunotas-vairak-neka-980-majas-2020>

Source 3 Fire:**Description: Existing material, documents, links, methods, videos, etc.:**

Describe the special features of the country here - work out the USP

In Latvia, burning of dead grass is a major problem in spring - for example, in 2019, 3253 hectares of Latvian territory had burned down.

Burning grass causes significant damage to nature and its biodiversity, destroying valuable plants, insects, small animals and bird nests. The worst damage is caused by burning large areas of wood in late spring or even in summer, when almost all animals have woken up, birds have made their nests and laid their eggs. In addition, wet meadows, lake and river floodplains important for birds are also burnt⁶.

Notes: It is a myth that burning grass is an ancient Latvian tradition. There is no evidence in ancient beliefs and agricultural descriptions that this is a local tradition. Moreover, it is often even mentioned that grass was scarce. For Latvians, their land was sacred and was used to the full and maintained carefully, so there was no dry grass on the fields in spring. The burning of turf in Latvia began in Soviet times, introduced by immigrants.

⁶ <https://www.iem.gov.lv/lv/jaunums/vugd-kulas-dedzinasana-ir-aizliegta-sodama-un-bistama-riciba>

Source 1 Fire: If the renewable energy is competitive enough, why the share of fossil fuel usage for primary energy generation prevails other alternatives?

There are three basic prerequisites for the realization of renewable energy systems, which are vital for sustainability: the existence of a natural energy cycle, the applicability of techniques and methods that transform this energy flow into usable form, and finally, the economic criterion (Twidell and Weir 2015)

It is known that most of the renewable energy types have become widespread by meeting the prerequisites. The cost of electrical energy obtained from any energy source, called levelized cost of electricity, is shown with LCOE. Renewable energies such as wind, hydraulic and geothermal are highly competitive compared to electrical energy derived from fossil fuels. The size of the implementation projects is growing and the costs are decreasing gradually (https://www.eia.gov/outlooks/aeo/pdf/electricity_generation.pdf).

On the other hand, some resources, such as the sun, need additional incentives in most geographic regions of the world. The cost of electricity produced from solar radiation in Turkey is still a bit high compared to other alternatives. Despite huge progress in competitiveness of renewable sources, electricity generated from fossil sources (Coal and natural gas) in Turkey constitutes approximately 60 % of total figure in 2020 (<https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>).

This situation indicates that each sustainable source should be evaluated separately in the transition to the free electricity market. The evaluation of bio-waste in energy conversion, on the other hand, has a mission to reduce methane emissions beyond economic criteria. This vital function must be taken into account and the additional cost must be covered. Additionally, transition strategy requires "an integrated design approach", which considers renewable resources in complementary way according to their supply characteristic, rather than relying on mostly fossil fuels from centralized regions. For instance, natural gas used in combined cycle for electricity generation may be successfully substituted with geothermal energy or biomethane in an energy system.

As a result, although energy systems are inertial structures that change slowly, economic analyzes in Turkey also indicate that sustainable transformation is imperative in the long run. To achieve this, we must better understand nature and design more complex energy systems.

Twidell J., Weir T., 2015. Renewable Energy Resources. Routledge Publishing. 3rd Edition.

Source 2 Fire:

How is the correlation between primary energy consumption and GDPs? -Are fossil fuel reserves a Global Management Tool for some?

"Energy use and GDP are positively correlated, although energy intensity has declined over time and is usually lower in richer countries. Numerous factors affect the energy intensity of economies, and energy efficiency is obviously one of the most important. However, the rebound effect might limit the possibilities for energy efficiency improvements to reduce energy intensity. Natural science suggests that energy is crucial to economic production but mainstream economic growth theory largely ignores the role of energy. Ecological economists and some economic historians argue that increasing energy supply has

been a principal driver of growth. It is possible that historically energy scarcity imposed constraints on growth, but with the increased availability of modern energy sources energy's importance as a driver of growth has declined. Empirical research on whether energy causes growth or vice versa is inconclusive, but meta-analysis finds that the role of energy prices is central to understanding the relationship (Stern D.I. (2018) Energy-GDP Relationship. In: Macmillan Publishers Ltd (eds) The New Palgrave Dictionary of Economics. Palgrave Macmillan, London. https://doi.org/10.1057/978-1-349-95189-5_3015)".

It is generally accepted that "all market economies are addicted to growth" and this growth linked with increasing energy demand. Here several questions come to the ground:

- Can we "globally" give up economic growth?
- Is sustainable economic growth realistic ?
- Will circular economy perspective provide fundamental change?
- Demand of economic growth is infinite but the world's resources are finite, so where is the end?

Unless the world globally agree on "real" sustainable transition, we should face the problems of fossil fuel dependency, excessive price fluctuation and reliability of energy resources. When considered this point of view, there is a very close relationship between Primary Energy Consumption and GDP in Turkey. Periodic regression analyzes prove the existence of this important relationship. Like most European countries, the main reason for the foreign trade deficit in Turkey is imported energy resources. Therefore, the vulnerability to the dynamics of the foreign energy market is considerable. Fossil energy reserves are concentrated in some parts of the world. Like most European countries, Turkey does not have these energy resources. Organizations that controlling or dominating this market, such as OPEC+, adversely affect other claimants in violation of full competition regulations. For this reason, Turkey and the European Union should be the most ardent advocates of decentralized renewable energy sources. In addition, well-balanced combination of renewable sources is inevitable for reliable domestic Energy systems.

FMM (Spain)

Source 1 Fire:

Description (in Engl.): Existing material, documents, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Although the fire is used as a management tool to burn stubble fields, fire is a huge threat to all ecosystems in Spain; eucalyptus plantations and abandoned agroecosystems - e.g.: dehesa where livestock management prevents bushfires – are the main “victims” of fire. It is calculated that a 96% of the bushfires are due to human action; Official numbers indicate that between 2011 and 2021 about 760.000 hectares were destroyed by bushfires.

[Incendios forestales, en datos, estadísticas y cifras \(epdata.es\)](https://epdata.es/Incendios-forestales-en-datos-estadisticas-y-cifras)

Although Spain has invested strongly in fire brigades specialized in extinguishing bushfires, my personal opinion is that the extensive livestock breeding as an instrument to prevent bushfires rather than to extinguish them should be supported – as a matter of fact, this would pave the way for economic activities, jobs., etc. in rural areas.



A Spanish farmer's saying is: bushfires are being extinguished in winter!

Unfortunately, envy and jealousy are very present in Spanish culture and putting fire is still a very widespread method to take revenge, harm or get even with somebody you consider you still have “a score to settle”.

Source 2 Fire:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Concerning *heating* it is calculated that 60% of Spanish houses have a heating system; most of them use radiant heating. In my personal opinion, one of the main problems is efficiency since the constructions in the South are mainly orientated towards high temperatures in Summer and isolation (roof, window, etc.) is often lacking. Very little innovation and/or

sustainability in Spanish heating systems and installations.

In the South – although it can get cold in winter – the popular consciousness is focused on protecting yourself from the heat not from cold.

Source 3 Fire:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

In terms of *energy*, Spain has 5 nuclear power stations with 7 reactors and a production capacity of 7.398,77 MW. ([Ministerio para la Transición Ecológica y el Reto Demográfico - Centrales Nucleares en España \(energia.gob.es\)](https://energia.gob.es/))

Electricity produced by the use of renewable resources covers a 43% fulfilling European requirements by far ([211227_ndpespanacumplelosobjetivoseuropeosderenovablesyeficienciaenergeticaen2020_tcm30-534574 \(1\).pdf](#))

In my personal opinion, Spain has focused too much on wind energy infra utilizing the potential of solar energy.

The Spanish Ministry for Ecologic Transition and Demographic Challenges has destinated € 177.000.000.- in 544 projects for innovation in renewable energies in 2022.

([La Moncloa. 20/01/2022. El MITECO destina 177 millones a impulsar 544 proyectos de energías renovables innovadoras \[Prensa/Actualidad/Transición Ecológica y el Reto Demográfico\]](#))

My impression is that, since Spain is blessed with sunlight, there is very little consciousness and concern among the population about saving energy or using it efficiently.

Source 1 Fire:

Description (in Engl.): Existing material, documents, methods, videos, etc.:

Describe the special features of the country here - work out the USP

The issue of energy efficiency and energy independence is one of the main prerequisites for Ukraine's sovereignty. For a long time, Ukraine has provided a significant part of households and enterprises with Russian fossil fuels, such as gas. Russia's military aggression against Ukraine forces us to urgently look for ways to replace them. One of the directions is to increase its own production of gas, oil and coal, the reserves of which are still available in Ukraine in sufficient quantities to at least provide households with domestic gas.

Decarbonization of the national economy, transformation of energy, forest, building construction and transport policies, and development of renewable energy sources in Ukraine became essential components of its recent environmental policy. However, transformation of energy policy with a focus on renewable resources, like forests, raises new sustainability challenges and needs a holistic view of the transformation process to avoid eco-destructive economic behavior and promote sustainable energy transition especially in fragile mountain regions like the Ukrainian Carpathians.

The determining factor in the transition to sustainable development is education. In pursuance of Agenda 2030, in particular Goal 7 Sustainable Energy, UNFU, in collaboration with WSL, has developed and implemented a master's degree in student choice called Sustainable Bioenergy. The discipline consists of two parts: theoretical training (lectures, seminars) and practical part - Real Labor. As part of the practical training, a joint seminar is being held for UNFU teachers and students at the venue - Real Labor. Boryslav in Western Ukraine was chosen as such a place.

- References

Farley, J., Zahvoyska, L., & Maksymiv, L. (2009). Transdisciplinary paths towards sustainability: new approaches for integrating research, education and policy. *Ecological economics and sustainable forest management: developing a transdisciplinary approach for the Carpathian Mountains*. IP Soloviy, WS Keeton (Eds.). – Lviv: Liga-Press, 55-69.

Soloviy, I., Melnykovych, M., Gurung, A. B., Hewitt, R. J., Ustych, R., Maksymiv, L., ... & Kaflyk, M. (2019). Innovation in the use of wood energy in the Ukrainian Carpathians: Opportunities and threats for rural communities. *Forest policy and economics*, 104, 160-169.

Nijnik, A., Nijnik, M., Kopiy, S., Zahvoyska, L., Sarkki, S., Kopiy, L., & Miller, D. (2017). Identifying and understanding attitudinal diversity on multi-functional changes in woodlands of the Ukrainian Carpathians. *Climate Research*, 73(1-2), 45-56.

Source 2 Fire:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

In the densely-forested Ukrainian Carpathians, wood is the most prominent bioenergy source used to meet the heat demands of households and public buildings. However, despite increasing forest area and timber volume in this region during the last 50 years, affordable bioenergy from forests remains scarce in many areas. The local communities suffer from energy scarcity, energy insecurity and high energy costs.

The video below reflects the efforts of the local community of Boryslav, Western Ukraine.

This Participatory Video was developed by InsightShare during a PV workshop as part of the Green Energy Project in the Carpathian Mountain region of Ukraine in collaboration with Ukrainian National

Forestry University and NGO FORZA, and was supported by the partners WSL (Eidg. Forschungsanstalt für Wald, Schnee und Landschaft) Switzerland:

<https://www.youtube.com/watch?v=kDBcj-y7Ly8&t=21s>

Boryslav – on the way to an energy independent community

Source 3 Fire:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

UNFU/Ukraine: Forest Fires at the Eastern Boarder of Ukraine: In Sept-Oct 2020 over 30 forest fires have been reported in the eastern Luhansk Region of Ukraine within the war zone, burning more than 13,000 ha. The most vulnerable area is between the cities of Stanytsia-Luhanska and Severodonetsk. Around 52 settlements have been affected and over 420 houses have been damaged or destroyed. The authorities deployed 2,557 firefighters and 264 vehicles to contain the blaze (<https://reliefweb.int/report/ukraine/ukraine-forest-fires-un-ocha-ukrainian-civil-protection-effis-media-echo-daily-flash>).

Chernobyl's Forests Pose Radiation Risk: Expert (If forests around Chernobyl catch fire, they could release nuclear radiation, UVM expert says). – (<https://www.uvm.edu/news/gund/chernobyls-forests-pose-radiation-risk-expert>)

Beyond the actual nuclear plant, the forests around Chernobyl do present a risk. These forests absorbed tremendous amounts of radiation during the 1986 disaster, and the trees and soils still contain significant radiation—in the form of large amounts of radioactive elements called radionuclides. If a forest fire happens—from a bomb, explosion, or fire—this radiation could be released into the atmosphere. Given the mix of radiation and fire-prone vegetation, the U.S. Forest Service has worked closely with Ukrainian experts to enhance local fire management capacity. The war and Russian occupation now hinder that capacity if fires break out. The forest's proximity to a warzone—on at least two fronts—creates an elevated risk for fire. Russian soldiers have now seized the Chernobyl plant, with reports of gunfire, explosions, hostages, power line damage, and other concerns. On the other side of the forest is Kyiv, which is being bombarded just 40 miles away.

Source 1 Fire: How does your culture and social environment access the topic?

Description (in Engl.): Existing material, documents, methods, videos, etc.:
Describe the special features of the country here - work out the USP

The heating system on the larger territory of the Republic of Macedonia is not centralized and ecological. Only in the capital of the country there is central heating system which is not environmentally friendly (we are still working on importing and creating installation conditions for gas), and in the last three years it has experienced a tenfold increase in price, so that the population was forced to disconnect from the heating system. This indicates the fact that many households heat with wood and other types of legal and illegal heating materials. Regarding renewable energy resources, there is a very low awareness among the population about their importance and use, which is reflected in other natural resources: air, soil and water pollution.

Source 2 Fire: What is your personal impression on the topic?

Description: Existing material, documents, links, methods, videos, etc.:
Describe the special features of the country here - work out the USP

In the last couple of decades there are minor efforts to raise awareness and take concrete steps to use renewable energy in everyday life and industry. Until a few years ago, the entire industry in the country used "expensive" and "dirty" energy for production, which later resulted in the pollution of other natural resources: air, water, soil, etc. The state subsidized solar collectors for households, efforts were made to use the wind as a natural resource, windmills were set up in areas where conditions were right, etc.

Source 3 Fire: Is there any material to identify or to illustrate? E.g. Photos, Videos, Graphics, Case studies

Description: Existing material, documents, links, methods, videos, etc.:
Describe the special features of the country here - work out the USP

<https://www.dw.com/mk/%D0%BF%D0%BE-%D1%81%D1%82%D1%80%D1%83%D1%98%D0%B0%D1%82%D0%B0-%D0%BE%D0%B4-%D1%83%D1%82%D1%80%D0%B5-%D0%BE%D1%87%D0%B5%D0%BA%D1%83%D0%B2%D0%B0%D0%BD%D0%BE-%D0%BF%D0%BE%D1%81%D0%BA%D0%B0%D0%BF%D1%83%D0%B2%D0%B0-%D0%B8-%D0%BF%D0%B0%D1%80%D0%BD%D0%BE%D1%82%D0%BE/a-60303815>

<https://www.romatimes.news/index.php/mk/categories/social/4223-tharaja-plastika-em-gume-te-saj-dzivdinaja>

KPH (Austria)

Source 1 Fire:

Description (in Engl.): Existing material, documents, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Our topics:

forest fires, heating fuels, energy supply, nuclear power is rejected / no nuclear power plant in Austria

Inside The Billion-Euro Nuclear Reactor That Was Never Switched On

Youtube-video: <https://www.youtube.com/watch?v=WUVZbBBHrI4>

How Austria survives without nuclear energy | Made in Germany

Video documentation: <https://www.youtube.com/watch?v=F-buGgjbT3o>

Source 2 Fire:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

How Upper Austria became the World's Leading Solar Thermal Market

<https://www.youtube.com/watch?v=2PE7tH8WXLE>

Source 3 Fire:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Austria: region gets 100% of its electricity from renewables

Video: <https://www.youtube.com/watch?v=JHe9z38rU3c>

forest fires in austria, How does the Austrian Fire Service work?

Video: <https://www.youtube.com/watch?v=b3THaGLutK0>

Element 2 – Earth

UCAEP (Austria)

Source 1 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Almost 50% of the Austrian land is covered by forests (<https://info.bmlrt.gv.at/themen/wald/wald-in-oesterreich/flyer-oesterreichs-wald.html>). Forestry has to strictly follow sustainability by law: Not more wood must be taken out than that is growing again. Forests have four functions: Protection (esp. in the alps against avalanches), forestry, living area for plants and animals and recreation for people which is used a lot: for the new "forest bathing" esp. in Corona-time, for hiking and biking. Forests seem to be part of daily life of many people. In the rural areas a lot of traditions are related to forests, restaurant's menus are regional and seasonal, e.g. red deer specialities....

Problematic is the draught that weakens the forests and gives way to parasites. Heavy storms cause windbreaks. Also monocultural planting of mostly the European spruce that made the biological resistance of forests weaker. So forests are in real danger.

Austria is a sad champion in floor sealant: An average of 24 football fields are sealed every year over the last 10 years. Political goals of reduction are made but are not very ambitious to obviously avoid harming economical success.

Source 2 Earth: culture and religion

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

A small shovel of earth is put into the grave as a bereaving symbol of the origin of human being: earth. Within hunters a small branch of pine trees is put into the mouth of the hunted animal as a symbol of a last meal to be reconciled with the being killed animal and a sign of respect to life.

The lime-tree is a culturally important tree (in restaurants' gardens, in songs, as a living monument...)

The Christmas tree was invented in Vienna or in Germany, to give an ironical word: depending on the point of view. It is a religious Christian symbol for the birth of Christ, for the green colour as a sign of life and hope like green flowers after a long lifeless winter. It became a symbol of family celebrations for all people despite being religious or not. There is also the "Adventkranz", the advent wreath, which comes from the Christian religion from the Lutheran traditions in Germany.

Source 3 Earth: environmental care

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

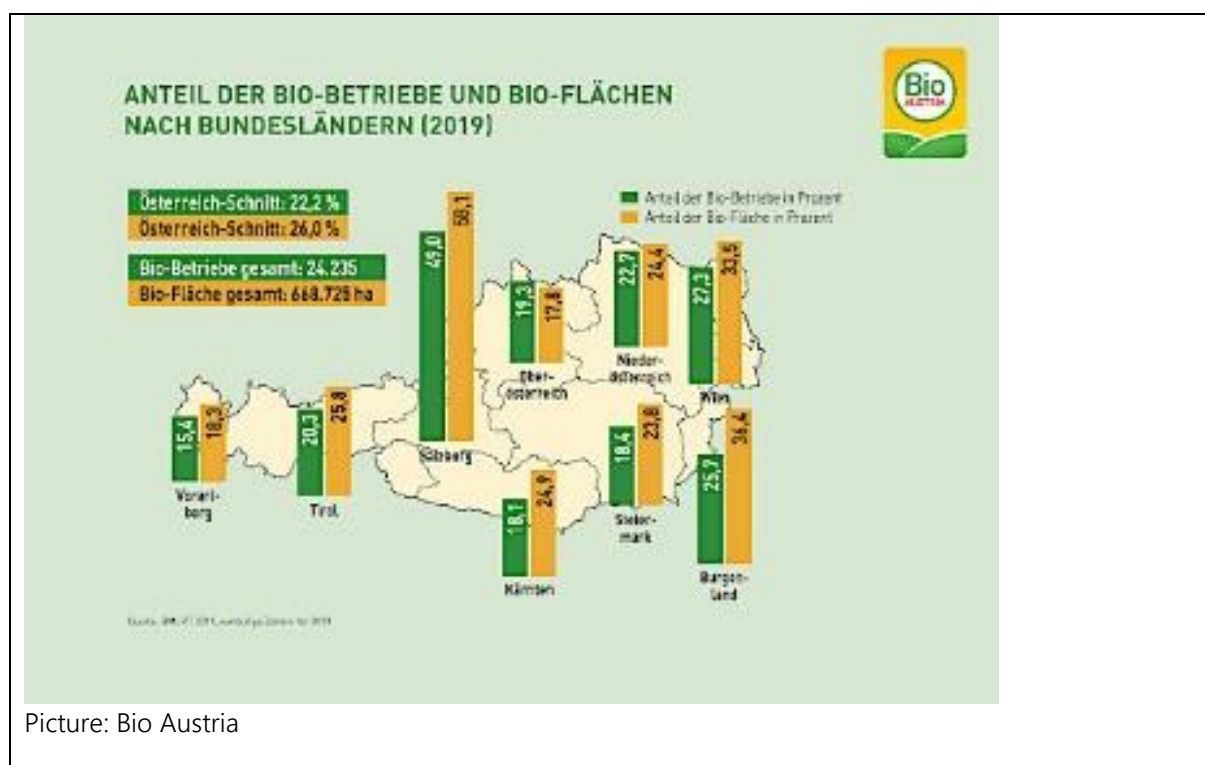
Against the forest's draught new kinds of trees like Douglas fir are planted and mixed forests are preferred to monoculture.

Positive is a trend that houses more and more are built by wood again because of storage of CO₂. It becomes an important part of Austrian building economy which are top in building sky scrapers by wood (<https://www.hoho-wien.at/en/>).

Public and economical discussions give the wood industry a growing impact in the next years as a build material, for heating, and for storing CO₂. An unsolved problem is that it would also need bigger areas for forests.

Ecofriendly agriculture is of growing importance for farmers as well as for consumers

(<https://en.nabu.de/topics/land-use/>). 22% of farms are ecofarms. The government is keen on raising this quite high value by programs and marketing. To help gaining more biodiversity EU and Austria promotes "Blühstreifen": a small part of the land is reserved for sowing seeds of insect-friendly flowers.



Picture: Bio Austria

LLU (Latvia)

Source 1 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Latvia participates in Waste brand audit 2021 for 4 years. The results show that strong legislation (in this case, the Plastic Products Reduction Act) is having a positive effect - the number of cosmetic (ear) bugs has been reduced by a factor of 3⁷!

Notes: Video about Circular economy: https://www.youtube.com/watch?v=KeeOsSWb_N0

Video about Waste-free hygiene, cosmetics and cleaning:

<https://www.youtube.com/watch?v=mJ5z5LYhOj4>

Report: NON-RECYCLABLE MATERIALS PLACED IN A LIGHT PACKAGING CONTAINER ANALYSIS:

<file:///C:/Users/Lietotajs/Downloads/Frakcijas-analize-zinojums.pdf>

Different materials of study Plastic in the Spotlight: <https://www.zerowastelatvija.lv/post/uzzini-visu-par-p%C4%93t%C4%ABjumu-plastics-in-the-spotlight>

Source 2 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

On 1 February 2022, a deposit system for beverage packaging started in Latvia⁸.

Notes: Video: <https://www.enefit.lv/majai/zinas/AUDIO-Zero-Waste-vs-Less-Waste>

Source 3 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Discussions are ongoing in Latvia on reducing tariffs for the deposit of bio-waste⁹.

33-50% of all food produced in the world is never eaten. This means that people are throwing away around one third of all the food they buy on a daily basis. In Latvia, around a third of food produced each year goes to waste, and households throw more than half of it away. Every person in Latvia throws away 122 kg of food. Food waste ends up in landfills (where most of it goes), decomposes without access to oxygen and produces methane, which is 23 times more deadly than carbon dioxide¹⁰.

The Latvian public is educated in various ways, including masterclasses.

Notes: Masterclass on composting: <https://www.instagram.com/p/CUc9VHmoXj0/>

Masterclass "What to do with food waste?" by chef Renārs Purmalis:

<https://www.instagram.com/p/CUmkteellMq/>

⁷ <https://www.zerowastelatvija.lv/post/atkritumu-zimolu-audits-2021-daugavgriva>

⁸ https://www.vvd.gov.lv/lv/depozita-sistema?utm_source=https%3A%2F%2Fwww.google.com%2F

⁹ <https://www.zerowastelatvija.lv/post/zero-waste-latvija-aicina-legalizet-kompostu> and <https://www.zerowastelatvija.lv/post/bioatkritumu-dalitas-vaksanas-tarifi-ir-pretruna-sabiedribas-interesem>

¹⁰ <https://www.zerowastelatvija.lv/post/ka-samazinat-partikas-atkritumus>

Source 4 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Latvia initiates "From Goods to Services" project¹¹.

Iceland 
Liechtenstein
Norway **Active citizens fund**

Source 5 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Latvia encourages the elimination of plastic packaging. In a study of 28 potentially dangerous chemicals, 13 of the 17 phthalates measured and 4 of the 11 phenols measured were found in the urine of all participants. Overall, 24 of the 28 measured substances were detected in Latvian samples. Study shows once again that substances from food packaging and other materials end up in the environment and in our bodies¹².

Notes: Different documents: <https://www.zerowastelatvija.lv/post/p%C4%93t%C4%ABjums-plastic-in-spotlight>

Source 6 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

According to a 2015 study by UNEP and the Ellen MacArthur Foundation¹³, only 1% of all clothing produced worldwide is converted into new clothing after wear. The rest ends up in the waste stream or at best (around 15%) cut into mattress fillings, rags, insulation materials, etc.¹⁴ Every year, 20 000-25 000 tonnes of new and second-hand clothing enter the Latvian market, or 14.3 kg of clothing per capita, increasing the amount of textiles potentially at risk of becoming waste¹⁵.

A good solution is the opening of second-hand shops, which are well represented in Latvia. In order to develop this direction, it might be necessary to look for a better term for second-hand clothing without the negative or derogatory connotations of, for example, the term "humpalas". The English have found a wonderful term: pre-loved, or 'previously loved', 'formerly loved' clothes.

From 2025, EU Member States, including Latvia, will have to provide separate collection for textiles.

Notes: Synthetic fibres, which make up 60% of textiles, take 200 years to decompose.

Different recourses about second-hand: <https://jauns.lv/raksts/pastaiga/396704-tam-vecam-bus-but-second-hand-ka-miljardu-bizness-un-trends> ;

<https://www.zalabriviba.lv/klimats-un-energija/> ; <http://www.videsvestis.lv/zal%CC%A7a-zona-sarunas-30-serija-intervija-ar-santu-krastinu/>

¹¹ <https://www.zerowastelatvija.lv/post/virz%C4%ABba-no-prec%C4%93m-uz-pakalpojumiem>

¹² <https://www.zerowastelatvija.lv/post/p%C4%93t%C4%ABjums-plastic-in-spotlight>

¹³ <https://ellenmacarthurfoundation.org/>

¹⁴ <https://multinews.lv/apgerbs-kuru-milet-jeb-latvijas-potencials-ilgtspejigas-modes-radisana/>

¹⁵ <https://lvportals.lv/norises/319825-pec-pieciem-gadiem-obligati-skirosim-ari-tekstilu-2020>

Source 1 Earth:

Description: Anthropocentricity of Common Religions, main cause of over-exploitation of nature?
"ANTHROPOCENTRISM vs BIOCENTRISM AMONG RELIGIONS"

Quoted from Britannica

Anthropocentrism, philosophical viewpoint arguing that human beings are the central or most significant entities in the world. This is a basic belief embedded in many Western religions and philosophies. Anthropocentrism regards humans as separate from and superior to nature and holds that human life has intrinsic value while other entities (including animals, plants, mineral resources, and so on) are resources that may justifiably be exploited for the benefit of humankind.

Many ethicists find the roots of anthropocentrism in the Creation story told in the book of Genesis in the Judeo-Christian Bible, in which humans are created in the image of God and are instructed to "subdue" Earth and to "have dominion" over all other living creatures. This passage has been interpreted as an indication of humanity's superiority to nature and as condoning an instrumental view of nature, where the natural world has value only as it benefits humankind. This line of thought is not limited to Jewish and Christian theology and can be found in Aristotle's Politics and in Immanuel Kant's moral philosophy.
<https://www.britannica.com/topic/anthropocentrism>

Is Islam anthropocentric?

For most references yes, there is no difference with other western religions. "The anthropocentric view is a human-centered ideology. Christianity, Judaism, and Islam are all religions that are considered to have a strong anthropocentric view..... (Enslow S. (2014) Anthropocentric View. In: Leeming D.A. (eds) Encyclopedia of Psychology and Religion. Springer, Boston, MA. https://doi.org/10.1007/978-1-4614-6086-2_34)."

Islamic theology tends to exalt the human species as the noblest of God's creatures (ashraf al-makhlughat), who are bestowed with divine "viceregency" (khalifa) over the Earth
(<https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100012322>). The Quran does not directly refer the term "ashraf al-makhlughat (noblest of all creatures)", majority of Muslims believe so, especially based on Surah As-Sajdah Verse 7 and Surah Al-Isra, Verse 70.

However, some researchers disagree with this widespread view. According to Rizvi (2010) "Islam rejects all forms of anthropocentrism by insisting upon a transcendent God who is utterly unlike His creation. Humans share the attribute of being God's creations with all other beings, which makes them internally related to every other being, indeed to every single entity in this universe." (Rizvi, A. M. 2010. Islamic Environmental Ethics and the Challenge of Anthropocentrism. American Journal of Islam and Society, 27(3), 53–78.
<https://doi.org/10.35632/ajis.v27i3.366>).

Buddhist Ecology (quoted from <https://www.encyclopedia.com>)

"In the Buddhist cosmological model individual entities are by their very nature relational, which undermines the autonomous self vis-à-vis the "other," whether human, animal, or vegetable. Buddhist environmentalists see their worldview as one that rejects hierarchical dominance of one human over another or humans over nature, and as the basis of an ethic of empathetic compassion that respects biodiversity. In the view of the Thai monk Buddhadasa Bhikkhu (1906–1993),

The entire cosmos is a cooperative. The sun, the moon and the stars live together as a cooperative. The same is true for humans and animals, trees, and the earth. When we realize that the world is a mutual, interdependent, cooperative enterprise...then we can build a noble environment. If our lives are not based on this truth, then we shall perish (Swearer, 1998, p. 20).

FONDATION MONTE-ROSE

In later schools of Buddhist thought the cosmological vision of interdependent causality evolved into a more substantive sense of ontological unity. The image of Indra's net found in the Huayan (Jap., Kegon) tradition's Avatamsaka Sūtra has been a potent metaphor in Buddhist ecological discussions: "Just as the nature of earth is one, while beings each live separately, and the earth has no thought of oneness or difference, so is the truth of all the Buddhas." For the American writer Gary Snyder the Huayan image of the universe as a vast web of many-sided jewels, each constituted by the reflections of all the other jewels in the web and each jewel being the image of the entire universe, symbolizes the world as a universe of bio-regional ecological communities. Buddhist environmentalists argue, furthermore, that ontological notions, such as buddha-nature or dharma -nature (e.g., buddhakāya, tathagata-garbha, dharmakāya, dharmadhātu) provide a basis for unifying all existent entities in a common sacred universe, even though the tradition privileges human life in regard to spiritual realization."

Although the Buddhist doctrines of karma and rebirth connect all forms of sentient existence together in a moral continuum, Buddhist ethics focus on human agency and its consequences, and, in this sense, Buddhism is anthropocentricas well.

Reference: <https://www.encyclopedia.com/environment/encyclopedias-almanacs-transcripts-and-maps/ecology-and-religion-ecology-and-buddhism#:~:text=Although%20the%20Buddhist%20doctrines%20of,Buddhism%20is%20anthropocentric%2C%20not%20biocentric.>

However, it seems that Buddhism's anthropocentrism is rather different from others, therefore, for being more holistic, SUSMIND project should include more implications from Eastern Religions from my point of view. Moreover, I think that "indigenous" religions should also be investigated in this respect.

Source 2 Earth:

Description: Cooperation or Competition in Nature?

I thought; believing that competition is essential and only the strongest will survive is one of the leading facts that makes people selfish. This is not entirely true and I don't think human genetics reflects this. E.g; Since we are mentally superior to other living things, if we cannot integrate into life sustainably, human life will not be possible after a while. Plants can naturally withstand high CO2 concentrations, which is not the case for humans and animals. This shows that the definition of superiority varies according to each situation.

Here some articles reflect the subject in detail ;

<https://www.permaculturenews.org/2017/09/22/cooperation-versus-competition-evolutionary-perspective/>

<https://medium.com/team-human/evolution-made-us-cooperative-not-competitive-60704d8fe49d>

<https://www.eomega.org/article/nature-doesnt-compete-it-cooperates>

A good example of cooperation in Rural areas is called IMECE (Communal Work) in Turkey

IMECE is the voluntary or compulsory doing of work in a village or village community (a group of communities can also do it) and collaboratively. If it is decided to solve any problem of the village, every house in the village has to meet the labor shortage. If money is also to be collected, it is called a keel (salma). If it is decided to collect money for a subject, each house has to make a financial

contribution in proportion to its size. IMECE is an unwritten law-based solidarity organization accepted by everyone in villages or small towns. Many works that a municipality should do are done in this way, since there are no municipalities in the villages.

Some examples of works that are done or can be done by collaborative method:

Construction of sewerage of the village.

Cleaning the pasture of the village.

Establishment of wedding venues.

School construction.

Mosque construction.

Collection of school fuel.

Cutting trees from the village grove.

Cleaning the village oven.

Collaboration required in charity work.

To meet the needs of items such as chairs, pots, cauldrons at weddings.

If there is a guest in the village, to host it.

Other works done together in villages.

Source 3 Earth:

Description: Best practices of Circular Agri-business models?

Circular food systems prioritize regenerative production, favor reuse and sharing practices, reduce resource inputs and pollution and ensure resource recovery for future uses

(<https://circulars.iclei.org/food-systems-handbook/>).

Links:

<https://www.ifpri.org/blog/circular-agriculture-vision-sustainability>

<http://eastasia.iclei.org/upload/portal/20210423/6f1e2510a30c6aa6046c3cd68ab6f1c3.pdf>

Source 1 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

North and South are very different here: whereas *erosion*, loss of soil, etc. are an extreme problem, the North does not have this threat.

In order to understand the contradictory attitude of, on the one hand, scarce soil and threat of erosion, and, on the other hand doing very little or nothing to preserve this basic resource, I will make a small digression into the structure of agrarian land distribution: in wide parts of the South, big landowners managed huge farms (latifundio) but never worked on the land, hardly ever even lived on the farm. The persons who worked the land and lived on the land, did not own it. For different reasons – one because maximum exploitation and output was the only interest they had in the land and the others because, whatever he or she did, would never get more than a lousy salary and inhuman labour conditions in most cases – with the disappearing of the Arabian management system with a head in each village, region or caliphate (1498) the sustainable management of soil and earth was extinguished; members of the Catholic Church, adventurers who came back from Latin America, etc. took over and sustainability in land management was replaced by greed seeking maximum income for the owners.

Source 2 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Concerning *waste*, Spain is quite a bit behind the rest of the European countries: Separation of waste (glass, plastic/aluminium, paper, oil, etc.), depositing the waste in the public containers for its removal are still attitudes to be 100% implemented. Especially in rural areas, there is a scarce consciousness for waste management. Shepherds in the mountains, for example, burn plastic bags or batteries and could not care less about environmental indications concerning waste management.

On the one hand, natural spaces are huge in Spain and, generally speaking, in good order, so the need to respect environmental management measures is not so obvious.

On the other hand, life on the countryside, in villages, etc. was quite poor in the last centuries in Spain and the garbage, which was produced, was natural and organic and could be thrown away on the countryside without any problem; once artificial objects and materials came into the life on the countryside, people just continued with the same habit.

A culturally interesting aspect concerning waste, especially in Andalusia, is, that the “responsibility” for a wasteless house and surrounding is clearcut: houses, sidewalks are free of waste and clean – but exactly at the curb, this “responsibility” ends and beyond the curb you can easily find the waste that has been swept there from the sidewalk.

[Vertederos, basura, estadísticas y datos](https://www.epdata.es/datos/vertederos-basura-estadisticas-datos/511) (<https://www.epdata.es/datos/vertederos-basura-estadisticas-datos/511>)



Basura.pdf

In the last 15-20 years, big efforts have been made by public authorities to install incineration and recycling plants, realize awareness campaigns, mainly in schools, etc.

My personal impression is, that public administration is not prioritizing waste management policies or awareness campaigns – due to whatever lack of consciousness and penalizing systems, especially in agriculture; although I admit that a lot has been done and the last 20 years, Spain has progressed a lot, especially in constructing plants to recycle, incinerate or compost, etc. the waste.

Source 1 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Organic Agriculture Development in Ukraine

According to the monitoring conducted by the Ministry of Economy, in 2020 the total area of agricultural land with organic status and transition period amounted to 462 thousand hectares (1.1% of the total area of agricultural land in Ukraine). At the same time, there were 549 operators of the organic market, of which 419 were agricultural producers. Ukrainian organic products are mostly bought by EU countries. According to a report by the European Commission in 2020, Ukraine ranked 4th out of 124 countries in terms of imports of organic products to the EU.

Life in organic Style. Organic Federation Movements of Ukraine. - <http://organic.com.ua/en/home/>
Organic Production in Ukraine

<https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=ed6463ce-f338-4ef0-a8a8-e778d3d0ffd1&title=OrganichneVirobnitstvoVUkraini>

Source 2 Erosion :

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Ukraine: Afforestation Experience and New Strategies <https://rubryka.com/en/2021/06/07/v-ukrayini-startuvav-proyekt-zelena-krayina-u-planah-za-10-rokiv-zbilshyty-ploshhu-lisiv-na-1-mlrd-ga/>

Ukraine has great experience in afforestation of abandoned and degraded agricultural land and protective shelterbelts for soil protection against wind and water erosion. In 2021 supporting the Declaration on Forest and Land Use initiatives of COP 26 UN Climate Change Conference in Glasgow (UK) Ukraine Government launched the Green Country project which plans to increase forest area by 1 million hectares in 10 years. Also the Law is under development about carbon certificates for landowners and investors.

Source 3 Waste :

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Lviv residents have developed a website that teaches garbage sorting 03/20/2018. -

<https://ecotown.com.ua/news/Lviv-yany-rozroblyly-resurs-yakyy-vchyt-sortuvaty-smittyu/>

Bambuk Design Studio (<https://bambukstudio.com>) based in Lviv in cooperation with Vitaliy Soloviy, PhD student of the Department of Ecological Economics UNFU has developed website Garbage31.com, designed to teach sorting and reducing the amount of garbage in the home. Thanks to the attractive graphics and user-friendly interface, the user can easily navigate in different types of waste in the game mode and quickly find answers to their questions, the developers promise. Currently, Garbage31.com already contains detailed information on the main types of household waste, as well as a list of inspected collection points for recyclables in Lviv.

Garbage 31 website: <https://garbage31.com/en/#/>

Source 1 Earth: How does your culture and social environment access the topic?

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

The Republic of North Macedonia has always been considered a country with a good geographical position where there is fertile soil for growing all crops. Due to that, a large part of the population in the country a few decades ago was engaged in agriculture as a primary subsistence activity. However, with the development of technology, the desire of people to engage in this activity has decreased. As a result, much of the soil in the country remains uncultivated despite its potential for work. There are some small steps that the Ministry of Agriculture is taking in order to stimulate farmers to engage in this activity, such as subsidizing the cultivation of certain deficient crops, but unfortunately unsuccessfully.

In terms of waste, it can be said that we are one of the societies that does the least for the selection and recycling of waste and where the culture of the population is at an unenviable level in this regard. Soil erosion is another problem we face as a country, which is most felt in the withdrawal of water from natural lakes in the Republic of North Macedonia, which is a threat to the extinction of many endemic wildlife.

Source 2 Earth: What is your personal impression on the topic?

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

The process of globalization as well as the development of technique and technology caused the expansion of professions in the field of IT sector, medicine and service activities which was reflected in the neglect of soil cultivation in the Republic of North Macedonia. Very little is done to stimulate young people to enroll in secondary vocational education where they would acquire professional competencies to engage in this activities and sector, but also adults who have already been engaged to be stimulated to continue their work.

Waste is one of the biggest problems that the country is facing. In addition to the fact that we have enormous air pollution, some of the companies in the country import waste that is not burned properly and because of that there are many criminal proceedings.

Erosion and drought as a result of global warming are reflected in the reduced water capacity of rivers, lakes and other water and land areas resulting in reduced growth and reproduction of plant and wildlife.

Source 3 Earth: Is there any material to identify or to illustrate? E.g. Photos, Videos, Graphics, Case studies

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

<https://www.moepp.gov.mk/%d0%bf%d1%80%d0%be%d0%b5%d0%ba%d1%82%d0%b8/%d0%be%d1%82%d0%bf%d0%b0%d0%b4/>



KPH (Austria)

Source 1 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Our topics:

concerns about soil, sealing, compaction, crumbling, plant diversity / diversity, earth as habitat

Soil map of Austria

https://www.gifex.com/detail-en/2011-06-29-13974/Soil_map_of_Austria.html

Monitoring Soils: Austria VS Denmark

<https://www.youtube.com/watch?v=vQ5VbU89gFQ>

Functions of Alpine soils: Sustainable development also depends on soil

<https://www.youtube.com/watch?v=vfhimmdPBNY>

Source 2 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Soil management in Austria with Andreas Wickhoff MW

<https://www.youtube.com/watch?v=Qexs4G2XH20>

Source 3 Earth:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

TÜV AUSTRIA OK compost: Warum die Umwelt der Schlüssel zum biologischen Abbau ist

<https://www.youtube.com/watch?v=TC30GbxqM9c>

Element 3 – Water

UCAEP (Austria)

Source 1 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Austria is a country rich in water. It can easily meet its water needs. Nevertheless, there are regions where water is scarce due to lack of rain. In winter, skiing is one of the most important sources of tourism revenue. Ski slopes are covered with artificial snow to prevent the lack of snow. For this purpose, huge snowmaking ponds are already filled with water in summer to be able to produce snow in winter. These are huge intrusions into nature.

Hydropower as a source of electricity is very important in Austria. The Kaprun power plant near the highest mountain in Austria, the Grossglockner, was an important symbol of reconstruction after World War II, and was considered a sign of technical progress in Austria. Today, Austria can cover 34% of its electricity needs from hydropower. https://de.statista.com/themen/2265/wasserkraft-in-oesterreich/#topicHeader_wrapper

This includes the large storage power plants but also the run-of-river power plants on the Danube, Mur, Enns and Inn rivers.

Austria has also made a name for itself in the wastewater sector. Sewage treatment plants are available throughout Austria and guarantee the drinking water quality of our rivers and lakes.

Water is also a religious symbol. In Christianity, it has an important meaning in baptism and also in blessing people and objects.

During his term of office, Bishop Stecher of Innsbruck initiated a drinking water well project in Africa to show that as a water-rich country it is also important to help those countries that repeatedly suffer from water shortages.

Since monks were not allowed to eat meat during Lent, fish farming (since fish was not considered meat) was practiced at the monasteries. Even today, many fish ponds around monasteries are part of the landscape. <https://info.bmlrt.gv.at/themen/landwirtschaft/landwirtschaft-in-oesterreich/tierische-produktion/fischzucht-oe/aquakultur.html>

The most commonly produced fish is the carp. As you can see from my name ;-)

Source 1 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

We all need 20-50 litres of water every day, free from harmful contaminants, to meet our basic needs¹⁶. Producing 1 kg of meat consumes the same amount of water as an average household in 10 months (50 l per person per day)¹⁷. Following the WHO recommendations, as well as the various religious canons, would reduce meat consumption -> water consumption would also be reduced.

Source 2 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

"Green Certificate" is an eco-certification or environmental quality mark of national importance for rural tourism enterprises, initiated in 1999 by the Latvian Environmental Protection Fund and launched in 2001 by the Latvian Rural Tourism Association "Lauku ceļotājs" with the support of the EU LIFE Programme. This certificate is awarded to tourism farms by a commission of environmental experts. The certificate indicates that the farms are managed in a way that respects the environment, conserves natural resources (including water resources^{18 19}), preserves landscapes and biodiversity, and respects local traditions. There are 77 rural tourism enterprises in Latvia that have received the Green Certificate for the first time or have renewed it and are recognised by the brand name "Green Holidays"²⁰.

Source 3 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

In Latvia, about 185 million m³ of water is extracted from both surface and groundwater annually, of which more than 45% is used for municipal services (drinking water supply), about 25% for agriculture, about 20% for industry, and about 7% for other sectors.

Latvia's water resources are fully sufficient to provide the population with good quality drinking water²¹.

Water reuse in Latvia is currently well below its potential. Currently, water reuse in Latvia is not integrated into water resources planning and management documents²².

Notes: Water - for religious rituals - <https://www.youtube.com/watch?v=hp1pXtZXO-A> .
<https://lpr.gov.lv/lv/2021/udens-resursu-izmantosana-un-to-taupisanas-iespejas-infografika/#.YjH5zeozaUk>

¹⁶ 2nd UN World Water Development Report, 2006

¹⁷ SIWI: Saving Water: From Field to Fork - Curbing Losses and Wastage in the Food Chain, 2008

¹⁸ https://galerija.celotajs.lv/g/www/brand/Zalais_sertifikats/Ka_taupt_udeni_web.jpg

¹⁹ https://galerija.celotajs.lv/g/www/brand/Zalais_sertifikats/Udens_taupisana_10ieteikumi_web.jpg

²⁰ <https://www.celotajs.lv/lv/news/item/view/979>

²¹ VIDES POLITIKAS PAMATNOSTĀDNES 2021.- 2027. gadam

²² <http://www.videsvestis.lv/dot-udenim-otro-dzivi/>

UTEMM (Turkey)

Source 1 Water: Some references to Water in Islam

The Qur'an makes frequent references to "water". The holy book of Islam mentions "how the rain is formed", "water cycles in the atmosphere", "the rain is sent down to the earth with a sensitive measure and resurrection of dry soil with water", "the underground waters", "the water circulation and the purification of the polluted waters". The Qur'an draws attention to the abovementioned great blessings, and calls the rain "mercy (rahmet)".

Source 2 Water: Islamic Water Law

"Water is considered one of the most profound elements in Islam. Water is also necessary for cleaning one's home and personal effects, as well as for general hygiene. It is indispensable to agriculture and industry: He it is who sends down water from the sky. With it, we bring forth plants of every kind (6:99). It cannot be denied that all human beings rely on water for life and good health, but for Muslims, water is first and foremost, a social good in Islam. It is also regarded as a blessing from Allah that gives and sustains all life in this world. Furthermore, the word "water" appears sixty-three times in the holy book of Muslims, Al-Quran. This indicator shows the importance of water in our daily life."

Reference:

<https://onlinelibrary.wiley.com/doi/10.1002/047147844X.wl43>

Source 1 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Relationship to water is very different from region to region: while there are areas – mainly in the North – where there is plenty of water, in other regions savannah-like character and even desert-like, water is scarce. In the last years, it is even getting worse: Northern regions suffering from drought.

Droughts are frequent and also getting worse every time in Southern areas, mainly Andalusia:



During the Franco-Regime, a lot of dams/water reservoirs were built burying fertile horticulture areas, whole villages, small farms, etc. in order to supply the cities with water. The focus was on supplying water to the cities not on a sustainable and fair way to distribute water also in the rural areas.

On the 4th of March, 1981, during a demonstration claiming for water for agricultural use in Huerca - Overa (Almería province), María Asensio Morales (29 years) was killed by the police.

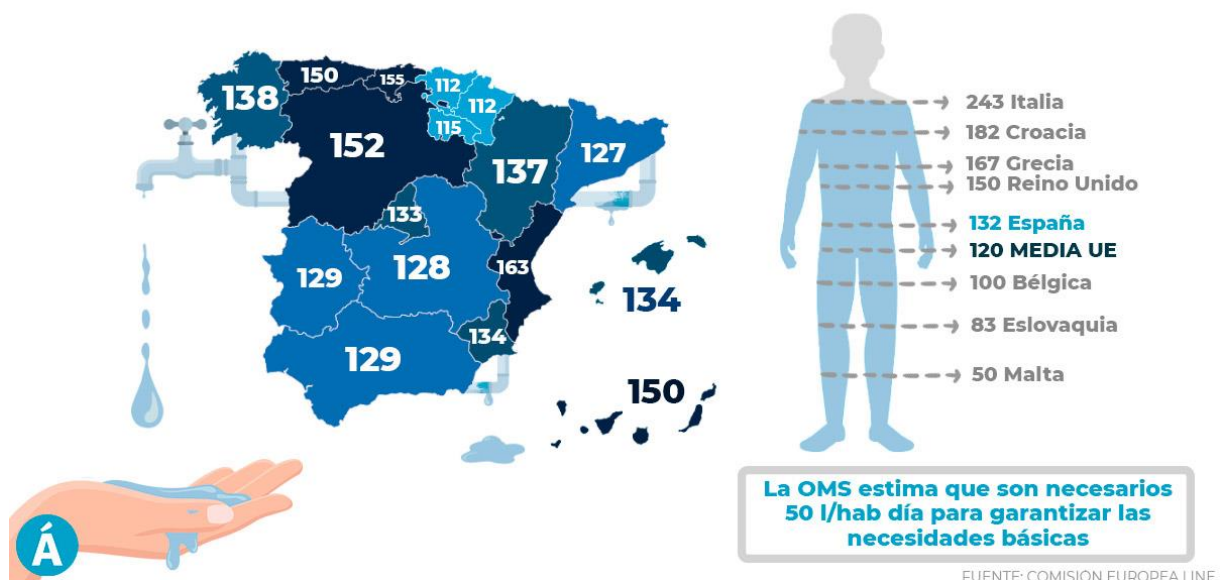
In January 1933, one of the demands of the so called "Insurrection of Casas Viejas" lead by peasants was free access to water. The insurrection ended in a massacre.

During Franco and after, water channels were built to irrigate dry areas for agricultural and horticultural production.



In spite of the scarcity of water, the irrigation systems are suboptimal – exposed to evaporation - and often not in good state, which means leaking, losing water.
The competent authority for the water management and administration is the national ministry in Madrid.

En España el consumo medio de agua es de 132 l/hab al día



Authorities prosecute the illegal construction of wells.

In 2006, WWF Spain published (awsassets.wwf.es/downloads/uso_ilegal_del_agua_mayo06.pdf) that in Spain there were 510.000 illegal wells which meant that by then, 3.600 hm³ of subterranean water were extracted illegally (equals to consumption of 58 million inhabitants in 6 months).

Historically Romans and Arabians during their reigns, left for the future sustainable irrigation systems in the Southern and Mediterranean area:

The word for these irrigation systems is “acequia” (Arabian origin)





In various villages mainly in the provinces of Granada, Almería, there still exists an important position in the municipality called “el fiel del agua” [the loyal of water]; this person distributes the water to the different farms and horticulture gardens according to clearly established rules guaranteeing the fair distribution.

The price of the water for households is 1,91 €/m³



Varying between 1,16 €/m³ and 2,68 €/m³. In agriculture and horticulture – in order to be competitive – water in Andalusia, e.g., costed in 2017 0,3 €/m³ although the cost of desalinated sea water, for example was more than 0,6 €/m³ and for regenerated water (only 20% of wastewater can be regenerated) is 0,05-0,15 €/m³.

Apart from excessive and illegal use of water in agriculture and horticulture, tourism is one of the water drunkards: in the driest and most threatened area of Spain – Andalusia – there are 90 golf courses. But not only the excessive use of water for touristic activities is a problem: wastewater management is usually calculated for the number of permanent residents and an average number of tourists. Unfortunately, wastewater systems are often constructing for minimum burden – the overload goes into the sea or elsewhere – untreated!!!

Notes: My personal opinion is that water management in Spain is “very unsustainable” and based in interest of lobby groups not guided by the sense of sustainability based on excellent historic models.

Source 1 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Water is a critical resource both for the maintenance of human life and for the functioning of the economy. There is currently no shortage of water resources in Ukraine. Mission of the State Water Agency is implementation of state policy in the field of management, use and reproduction of surface water resources, development of water management and land reclamation and operation of state water facilities of complex purpose, inter-farm irrigation and drainage systems.

Presentation on water resources of Ukraine: https://www.riob.org/IMG/pdf/P-Kovalenko_Prezentaciya1.pdf

Source 2 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Forest for water services. A Step-by-Step Guide for Payment Schemes : <https://cutt.ly/DOMzWjQ>

The User Manual has been translated into various languages. Different versions ([German](#), [Polish](#), [Slovak](#), [Spanish](#) and [Ukrainian](#) versions) are available.

Source 3 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Understanding and reducing agricultural drought risk: Examples from South Africa and Ukraine (UN University study). - <https://ehs.unu.edu/news/announcement/understanding-and-reducing-agricultural-drought-risk-examples-from-south-africa-and-ukraine.html>

Ukraine has experienced severe drought conditions every two to four years. The impact of drought on agriculture does not only depend on the lack of rainfall and/or soil moisture deficit in a region, but also on the exposure and the vulnerability of the agricultural system and the people depending on it. The Sendai Framework for Disaster Risk Reduction (SFDRR), adopted by the United Nations member states in 2015, highlights the urgent need to shift thinking from reactive, hazard-centered disaster management to proactive disaster risk management and risk reduction. Read the full policy report which give understanding propose solutions for reducing agricultural drought risk using examples (case studies) from South Africa and Ukraine [here](#).

Source 1 Water: How does your culture and social environment access the topic?

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

In the Republic of North Macedonia, unfortunately, we have not yet developed sufficient environmental and ecological awareness for any of the basic natural resources, not even for water. A large part of the population is not educated about the rational use of clean and drinking water, although fortunately the environment still provides sufficient natural sources of clean water supply for most of the population, usually coming from springs. But lately, as a result of global warming and the human factor, certain sources have been shut down and part of the population does not have enough bacteriologically safe drinking water.

Source 2 Water: What is your personal impression on the topic?

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

My personal impression of the topic, as a citizen of a developing country is that little attention is paid in creating environment in which clear water sources can be recognised and used as important and a little is made to preserve water sources in the country, regarding the present situation and the threats for droughts caused by the global warming. On the contrary many activities are undertaken related to higher policy goals for pollution and extinction of water resources, such as the creation of illegal landfills near water sources. The awareness of the citizens about the economy and rationality in the use of drinking water is very low, so we often come across examples when it is used for irrigation of agricultural lands, washing of roads, residential and commercial buildings, etc.

Source 3 Water: Is there any material to identify or to illustrate? E.g. Photos, Videos, Graphics, Case studies

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Notes:

<https://zelenaberza.com.mk/%D0%BC%D0%B0%D0%BA%D0%B5%D0%B4%D0%BE%D0%BD%D0%B8%D1%98%D0%B0-%D1%81%D0%B5-%D0%B1%D0%BE%D1%80%D0%B8-%D1%81%D0%BE-%D1%81%D1%83%D1%88%D0%B0-%D0%B0-%D0%B5%D0%B2%D1%80%D0%BE%D0%BF%D0%B0-%D1%81%D0%BE/>



KPH (Austria)

Source 1 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Our topics:

water scarcity in Burgenland, soil sealing, swimming pools/water consumption, Lake Neusiedl, drinking water/quality, hydropower plants in Austria/Alps, Danube and small power plants

Renewable energy production from hydropower,

Glacier melting

Water in Austria

<https://info.bmlrt.gv.at/en/topics/water/water-in-austria.html>

Do we need to save water in the Alps?

<https://www.youtube.com/watch?v=yST4ikfDeUE>

Water Shortage & Snow Production

<https://www.youtube.com/watch?v=RocBc6YeQUI>

Source 2 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Hydropower in Europe: Spotlight on Austria

<https://www.youtube.com/watch?v=dV3E45zx7A4>

Traunleiten, Austria – Official inauguration of prestigious hydropower plant

<https://www.youtube.com/watch?v=mbbz1SflpLY>

Source 3 Water:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Slideshow: Alien world under Austria's doomed glaciers

<https://www.youtube.com/watch?v=JL2xIY3POhM>

WWI battlefields emerging from Austria's melting glaciers due global warming | Cop26

<https://www.youtube.com/watch?v=s652ao6VYdU>

Element 4 – Air

UCAEP (Austria)

Source 1 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Forests save CO₂. Trees in towns cool down the increasing heat periods. In the courtyards trees shape a microclimate. In Upper Austria, a federal country of Austria, there is the tradition to plant a fruit tree at the wall of the house. It had the meaning to help harvesting the fruits. Today it is a good symbol of harmony with nature.

In religion air plays an important role. Air is a symbol of breath which itself stands for life and soul. This relates to daily life experience. Distress speeds up breathing. Relaxation methods calm down breathing. In Christianity God is air and breath in the godly person 'Holy Spirit'. At Pentecost which relates to spring celebrations of Jewish religion there are many confirmations, a youth ritual (sacrament) that is on the shift from young to adult person. It stands for maturity to use your voice building up a better world and church.

Source 2 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

There is quite high rate of air pollution esp by industry. Towns like Linz with its steel industry and Graz with its geographical site as inversion climate have problems with ozone and dust/smoke.

Heavy storm e.g. by hot wind destroy houses and forests.

Air emission trends: <https://www.umweltbundesamt.at/en/news220308en> show that air emission rises in transport and traffic. Heating, industry and agriculture decreases.

Source 3 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

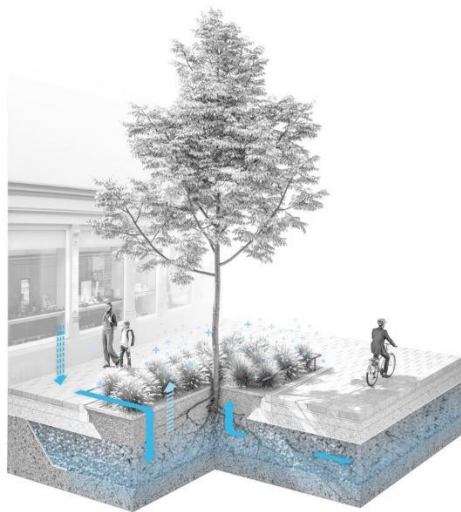
In towns more and more trees are planted, there are public programs e.g. in Vienna, that thousands of trees will be planted in the next years. In a growing district of Vienna a forest will be planted to reduce heat in summer and for recreation.



Pupils plant 10000 trees. Picture: kurier.at

In Austria electricity by windmills is an important economical industry. There is a surprising development: Although many were sceptical

In Vienna a system is being developed that below trees water can be stored by "sponges", materials that save rainwater for rainless periods.



picture: www.schwammstadt.at

Source 1 Air:

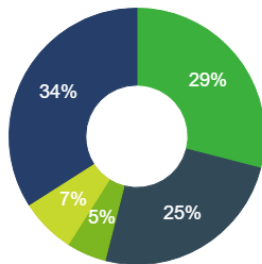
Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Over the last 70 years, the amount of CO₂ in the atmosphere is almost 100 times higher than at the end of the last ice age. In Latvia, the average air temperature is currently the highest in the history of observations - the five-year average exceeds 7° C²³.

Main sectors of greenhouse gas emissions in Latvia²⁴:

■ Transports ■ Lauksaimniecība ■ Atkritumu apsaimniekošana
■ Rūpnieciskie procesi un produktu izmantošana ■ Enerģētika



The society in Latvia is being educated: by choosing 100% renewable energy, a household with an average electricity consumption of 200 kilowatt hours per month reduces its CO₂ emissions by around 750 kg per year. This is about the same as 289 deciduous trees can absorb, and as much as we do when driving 5236 km with one of the most frequently used cars in Latvia.

Households can use a green energy calculator²⁵.



IT technologies make it easier to apply for green energy in households:

Izvēlies 100% no atjaunīgiem resursiem ražotu enerģiju

Esi atbildīgs pret vidi un pievieno savam elektrības produktam arī Zaļo enerģiju

ZAĻĀ ELEKTRĪBA (Dažādu resursu)

Elektrība, kas ražota no dažādiem atjaunīgiem resursiem

Tikai papildu 1 eiro mēnesi elektrības rēķinā

[Izvēlies zaļo elektrību >](#)

VĒJŠ

100% vēja ražota enerģija

Tikai papildu 1,99 eiro mēnesi elektrības rēķinā

[Izvēlies vēja enerģiju >](#)

SAULE

100% saules ražota enerģija

Papildu 1,99 eiro mēnesi elektrības rēķinā

[Izvēlies saules enerģiju >](#)

²³ <https://www.enefit.lv/ilgtspējīga-attīstība>

²⁴ 2017. gada dati (Avots: Informatīvais ziņojums "Latvijas stratēģija klimatneitralitātes sasniegšanai līdz 2050. gadam", 2019)

²⁵ <https://www.enefit.lv/majai/elektriba/zala-enerģija>

Source 2 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

At present, a total of 982 thousand vehicles are registered in Latvia, of which 1965 are powered by an electric motor, accounting for only 0.2% of the total number²⁶.

Guidelines for the Development of Transport 2021-2027 In the draft plan, the Latvian transport sector, which is one of the main sources of greenhouse gas (GHG) emissions, has to reduce emissions by 18% in 2023, compared to 2018, and by 23% in 2027.

How is the development of electric cars promoted in Latvia?

- *Firstly, there is no road tax to pay for an electric car, and its first registration with the CSDD is free;*
- *The national roadworthiness test is only an administrative cost, and it can be driven in the public transport lane and parked for free in major urban car parks;*
- *From 2022, the state plans to provide support for the purchase of a new electric car in Latvia in the amount of 4,500 euros, but support amounting to 2,250 euros is planned for the purchase of a used electric car;*
- *As technology develops, in the future electric cars also have the potential to balance the electricity grid - returning the electricity stored in the batteries back to the grid at the right time and being paid for it.*

²⁶ <https://www.enefit.lv/majai/zinas/Enefit-auto-elektrifikacija-atrakais-veids-co2-samazinasanai-vide>

Source 1 Air:

Decarbonization of Farm Practices-To what extent fossil-free agriculture is possible by current scientific and technological developments?

Considering the basic cycles such as the carbon and nitrogen cycle in nature, I think that agricultural processes can become circular and a closed loop. In fact, agriculture is an artificial ecosystem and nature's own cycles are simulated at this point. Some of the biomass produced as a result of farm practices and photosynthesis can be used for the production of biofuels and biofertilizers with proven processes. This transformation makes farming systems more sustainable by reducing reliance on finite sources.

Last years, the EU programs called projects to focus on fossil free agricultural systems

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-fnr-06-2020>

Studies are mostly at research phase, here some example;

<https://www.agrofossilfree.eu/overview/>

<https://aseed.net/new-campaign-fossil-fuel-free-agriculture/>

<https://www.lkabminerals.com/en/fossil-free-mineral-fertilizer-vital-for-agriculture/>

Source 2 Air:

Description: Importance of distinguishing between natural climate cycles and the anthropogenic impact on climate change.

We are all accustomed to "revolving cycles" shaping our life. Cycle means repetitive events in same order such as seasons, migrating birds, life-cycles. Some natural cycles also play important roles in Earth's long-term climate. A Serbian Mathematician Milankovitch formulated a hypothesis for the long-term effect of the earth's variable (...known as stable) position and movements in space. These positional changes occur in 3 different cycles. These cycles in different time dimensions are directly related to the climate structure in a complex way. The aforementioned climate change hypothesis of Milutin Milankovitch has been tested by his successor scientists and proven to be correct. Therefore, the climate is not stable as it is thought, but has a structure that slowly changes over time. The entry of the world into ice ages is also explained by this hypothesis. It should be emphasized once again that this change takes place within the framework of natural cycles.

On the other hand, the term "climate change" refers to the unnatural change in the climate structure as a result of economic activities and human-anthropogenic influence. This change is extremely dangerous and can be prevented if necessary precautions are taken. Today, global efforts for reducing the effects of climate change aim to eliminate the anthropogenic human influence. Citizens who understand this difference better are more resilient to malicious manipulations on climate change.

Some media resources are still sceptical about global warming; *"In recent years, global warming and climate change have been the subject of a great deal of political controversy, especially in the U.S. But as the science becomes clearer and consensus grows impossible to ignore, debate is moving away from whether humans are causing warming and toward questions about how best to respond."*

Resource: <https://www.nationalgeographic.com/environment/article/global-warming-real/>

LINKS:

<https://www.youtube.com/watch?v=iA788usYNWA>

<https://www.youtube.com/watch?v=eB3DJtQZVsw>

https://www.youtube.com/watch?v=qKY7AN3tB_s

<https://climate.nasa.gov/news/2948/milankovitch-orbital-cycles-and-their-role-in-earths-climate/#:~:text=The%20Milankovitch%20cycles%20include%3A,is%20pointed%2C%20known%20as%20precession.>

Source 1 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Spain has a surface of 505.990 km² with a population density of 94 inhabitants/km² - taking in account that only 88.404,17 km² a 17,41% of the territory of Spain is urban.

Spanish authorities are not very diligent in terms of publishing figures on air quality (latest statistic from 2019) year, in which the European Commission brought before the European Court of Justice that Spain was not guaranteeing good air quality to its population.

Nevertheless, there are huge differences between air quality in rural and in urban areas.



Example for air quality, January, 3rd, 2020

My opinion is that Spain, among other shortcomings in this respect, is not administering and managing well the carbon credit for emission reductions.

On the "popular level" fresh air is available on 82% of the surface and as long there is no scarceness, usually it is not in people's consciousness.

Source 1 Air pollution:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Ministry of Ecology and Natural Resources of Ukraine works in line with EU institutions and set goals like 65 % decrease of carbon emissions till 2030 comparing to 1990.

UNFU/Ukraine: Ukraine ranks eighth in Europe in air pollution. Over a third of the population suffers from some form of respiratory disease. The total green area within Ukrainian cities and other towns covers 396,600 hectares. This is less than 1 percent of the country's territory. Ukraine has more than 6,000 landfills. A quarter of them do not meet safety standards. Since November 2019, UNDP Ukraine has promoted the concept of nature-based solutions, shaping a stakeholder community around the topic (<https://www.ua.undp.org/content/ukraine/en/home/projects/nature-based-solutions-for-sustainable-cities-in-ukraine.html>).

Short relevant video <https://www.ua.undp.org/content/ukraine/en/home/projects/nature-based-solutions-for-sustainable-cities-in-ukraine.html>

Source 2 Air, Oxygen, CO₂ :

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

The Covenant of Mayors, the world's largest movement for local climate and energy actions. This is an initiative of the European Commission, which aims to unite European local authorities in voluntary education to jointly combat global warming. The signatories of the Covenant of Mayors are committed to leading Europe's local governments to volunteer to work together to combat global warming by reducing EU emissions by at least 30% by 2030, by implementing energy-saving measures and expanding the use of renewable energy sources. . More than 300 Ukrainian cities such as Kyiv, Lviv, Sumy, and towns such as Dolyna, Drohobych, Zhovkva and others are participating in the Covenant of Mayors on Climate and Energy.

Source: <https://www.eumayors.eu/about/covenant-initiative/origins-and-development.html>
<http://www.com-east.eu/uk/spysok-pidpysantiv/>

Source 3 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Competitiveness or the new order: why Ukraine needs a policy of CO₂ -

<https://ecotown.com.ua/news/Konkurentozdatnist-chi-noviy-poryadok-chomu-Ukraini-potribna-politika-CO/>

In addition to external factors in the form of policy changes and business regulation in export markets, Ukraine's internal climate challenges remain unresolved. The media relevance of the

topic of "air" in Ukraine has long been seasonal due to the habit of people to burn garbage in autumn and spring, plus seasonal field fires in agriculture (Figure 1). And the climate effect of Ukrainian industry and transport has become less mentioned in the media and social networks - big business is unwilling to pay extra money in taxes and tariffs, and citizens do not see the need to pay extra taxes on cars and fuel, citing distrust of the state as effective manager. Therefore, the question of who will finance the energy transition in the framework of state environmental policy, like many others, remains "unfinished."

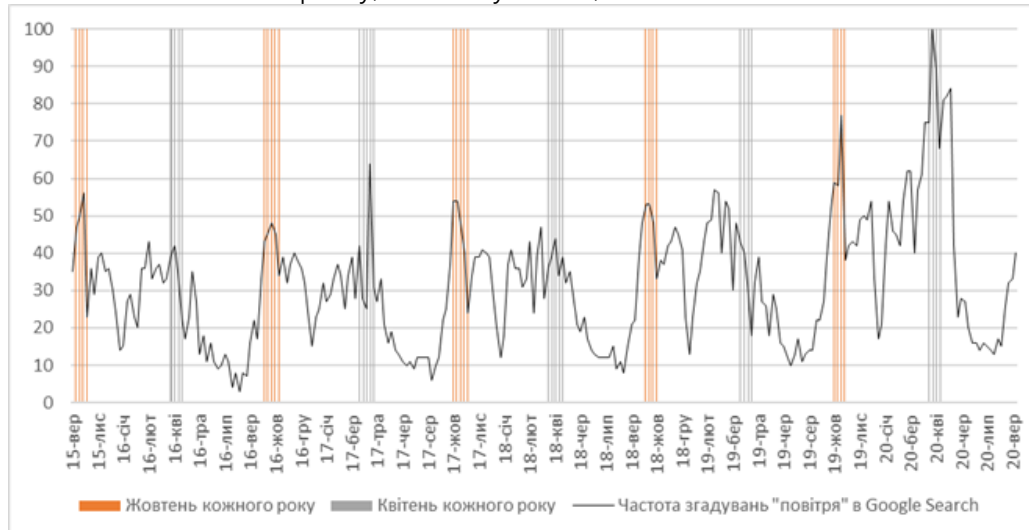


Figure 1. Seasonality of the frequency of mentioning the word "air" in Google Search

Source 1 Air: How does your culture and social environment access the topic?

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

At the moment, air pollution is one of the biggest challenges facing Macedonian society. A series of strikes and protests were undertaken against air pollution, which according to the analysis is one of the most polluted in the world. The ecological culture of the people is at an unenviable level and the process of "awareness" is very slow in terms of the use of environmentally friendly means of transport, the use of renewable energy for heating. On the other hand, the state does not take into account the pollution from industry (lack of proper filtration, placement in settlements, etc.), as well as from illegal landfills, but also landfills that import waste from Europe.

Source 2 Air: What is your personal impression on the topic?

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Air pollution affects the health of every living person on the territory of the Republic of North Macedonia. This problem has persisted for decades and no political prominence has been able to solve it, most likely due to the high level of corruption prevailing in this area. In parallel with the political and legal regulations, work should be done on educating young people and adults about their role in preserving the environment and the importance of clean air for the proper development.

Source 3 Air: Is there any material to identify or to illustrate? E.g. Photos, Videos, Graphics, Case studies

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

https://air.moepp.gov.mk/?page_id=1351



KPH (Austria)

Source 1 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Our topics:

emissions, greenhouse gas emissions are getting higher instead of lower, expansion of public transport network, energy-saving cars

Austria: CO2 Country Profile

<https://ourworldindata.org/co2/country/austria>

Austria: carbon dioxide emissions 1970-2020 | Statista

<https://www.statista.com/statistics/449506/co2-emissions-austria/>

Video | Greenhouse gas emissions in Austria from 2000 to 2019 (tonnes per capita)

<https://www.youtube.com/watch?v=ZCEIz8ABiVg>

Green social housing in Vienna - "It should not become a luxury!"

https://www.youtube.com/watch?v=F_ndKDKK01A

Source 2 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Hunting for Methane Emissions in Austria

<https://www.youtube.com/watch?v=OliAb8E7qQA>

Endless Winter 2 - Saving the planet and the deepest winter in a decade

https://www.youtube.com/watch?v=sGV7JyGC_Q8

Source 3 Air:

Description: Existing material, documents, links, methods, videos, etc.:

Describe the special features of the country here - work out the USP

Transforming Public Transit in Austria

<https://www.youtube.com/watch?v=bTg8ArUXGwY>

Rail Cargo Group – Kings & Queens: Austria Glas Recycling

https://www.youtube.com/watch?v=zkjb0y_-GGg