TRAINING LESSON 5 - Part 1

Title	Water management
Part of the training course referred to in this lesson	**X** Part 1 General information about sustainability and CE Part 2 Specific Information about: ☐ Wood sector ☐ Plastic sector ☐ Agrifood sector
EQF level	Level 3
Where the lesson was tested	//
General Learning objective(s) according to the Bloom Taxonomy https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/	☐ **Create** Produce new or original work (design, assemble, construct, investigate, formulate) ☐ **Evaluate** Justify a stand or decision (appraise, argue, defend, critique, select, support) X **Analyze** Draw connections among ideas (differentiate, organize, relate, compare, distinguish, test, experiment) X **Apply** Use information in new situations (execute, implement, solve, use, demonstrate, operate) X **Understand** Explain ideas or concepts (classify, discuss, describe, identify, locate, translate) ☐ **Remember** Recall facts and basic concepts (define, duplicate, list, memorize, repeat)
Specific learning objective(s)	● To understand water cycle on, in, and above the Earth, water types and their importance to ecosystems, biodiversity, people ● To analyse water usage, consumption patterns ● To apply water pollutant knowledge choosing food, clothes,

	cleaning, hygiene and cosmetics production • To apply virtual water and water footprint concept choosing goods
Cognitive, socioemotional and behavioural outcomes based on https://www.unesco.de/sites/default/files/2018-08/unesco_education_for_sustainable_development_goals.pdf	**SDG 6 Clean Water and Sanitation: Ensure availability and sustainable management of water and sanitation for all** **Cognitive learning objectives** The learner understands water as a fundamental condition of life itself, the importance of water quality and quantity, and the causes, effects and consequences of water pollution and water scarcity. The learner understands that water is part of many different complex global interrelationships and systems. The learner understands the concept of “virtual water”. **Socio-emotional learning objectives** The learner is able to feel responsible for their water use. The learner is able to communicate about water pollution, water access and water saving measures and to create visibility about success stories. **Behavioural learning objectives** The learner is able to contribute to water resources management at the local level. The learner is able to reduce their individual water footprint and to save water practising their daily habits. **SDG 9 Industry, Innovation and Infrastructure: Build infrastructure, promote inclusive and sustainable industrialization and foster innovation** **Socio-emotional learning objectives** The learner is able to recognize and reflect on their own personal demands on the local infrastructure such as their carbon and water footprints and food miles.

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SDG 12 Responsible Consumption and Production: Ensure sustainable consumption and production patterns

Cognitive learning objectives

The learner understands how individual lifestyle choices influence social, economic and environmental development.

Socio-emotional learning objectives

The learner is able to encourage others to engage in sustainable practices in consumption and production.

The learner is able to feel responsible for the environmental and social impacts of their own individual behaviour as a producer or consumer.

Behavioural learning objectives

The learner is able to plan, implement and evaluate consumption-related activities using existing sustainability criteria.

SDG 14 Life below Water: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Cognitive learning objectives

The learner knows the basic premise of climate change and the role of the oceans in moderating our climate.

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<tr><td>Green skill(s) addressed</td><td>

☐ Creative problem-solving
X Forward-thinking
☐ Monitoring skills
☐ Analytical skills
☐ Lean production
☐ Maintenance and repair skills
X Pollution prevention
☐ Eco-design

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☐ Management skills
☐ Impact quantification
X Life-cycle management
☐ Science skills
X Waste management
☐ Environmental auditing
X Ecosystem management
☐ Other___________________

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<tr><td>Duration</td><td colspan="2">20 minutes</td></tr>
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Structure and content of the lesson	**INTRO**: Water (H2O) is not in a static condition, there is no starting or ending point for the water cycle, occurring a continuous and dynamic exchange between the Earth spheres (UNESCO, 2011). Water is renewable and sustainable, but there is always the same amount of water on, in, and above the Earth ((1,386,000,000 cubic kilometers (km3), freshwater - 10,633,450 km3) and due to the water cycle our planet's water supply is constantly moving from one place to another and from one form to another. British poet W. H. Auden once noted, “thousands have lived without love, not one without water.” **Definitions** “***Fresh water*** *is water that contains low concentrations of dissolved salts and other total dissolved solids” (lakes and rivers, groundwater.).* https://en.wikipedia.org/wiki/Fresh_water *“All freshwater ultimately comes from precipitation of atmospheric water vapour, reaching inland lakes, rivers, and groundwater bodies directly, or after melting of snow or ice”.* https://www.greenfacts.org/glossary/def/freshwater.htm *“**Groundwater water** that occurs below the surface of Earth, where it occupies all or part of the void spaces in soils or geologic strata. It is also called subsurface water to distinguish it from surface water, which is found in large bodies like the oceans or lakes or which flows overland in streams. Both surface and subsurface water are related through the hydrologic cycle (the continuous circulation of water in the Earth-atmosphere system). 97 % of freshwater in the world is groundwater”.* https://www.britannica.com/science/groundwater “***Wastewater*** *is the polluted form of water generated from rainwater runoff and human activities. It is also called sewage. It is typically categorised by the manner in which it is generated—specifically, as domestic sewage, industrial sewage, or storm sewage (stormwater)”.* https://www.britannica.com/technology/wastewater-treatment **Some key concepts** UN set sustainable development goal 6: ensure availability and sustainable management of water and sanitation for all.

	Special importance of achieving this goal emerged in fighting COVID 19 - sanitation, hygiene and adequate access to clean water prevents diseases. Water cycle, water quality and access to the water resources are affected by: ➔ Overexploitation of groundwater ➔ Intensified irrigation in agriculture ➔ Dam constructions on surface waters ➔ Pollution, dumping and release of hazardous chemicals and materials ➔ Deforestation ➔ Climate change (changes in temperature and precipitation, droughts, floods, extreme weather events) ➔ Urbanization ➔ Industry water usage ➔ Population growth (personal, domestic usage and waste) **Water usage** Freshwater withdrawals (the quantity of freshwater taken from groundwater or surface water sources (such as lakes or rivers) for agriculture, industry and municipal uses — has increased nearly six-fold since 1900. India had the largest freshwater withdrawals at over 760 billion cubic metres per year China - over 600 billion m3 The United States at around 480-90 billion m3. To maintain sustainable levels of water resources, rates of water withdrawals must be below rates of freshwater replenishment. Per capita renewable resources depend on two factors: the total quantity of renewable flows, and the size of the population. **Major water consumers** ➢ Electricity (huge quantities of water are needed to cool the power producing equipment) ➢ Agriculture (agriculture consumes about 70% of the global freshwater withdrawals, almonds and walnuts were among the top three most water-intensive foods) ➢ Meat Products ➢ Manufacturing https://www.seametrics.com/blog/water-consumers/ Globally, 70 percent of freshwater withdrawals are used for agriculture.

	Water requirements vary significantly depending on food type. **Water pollution** Water pollution occurs when harmful substances—often chemicals or microorganisms—contaminate a stream, river, lake, ocean, aquifer, or other body of water, degrading water quality and rendering it toxic to humans or the environment. Fertilizers, pesticides (nitrates, phosphates, potash) used in agriculture and animal waste from farms and livestock is the leading type of contamination in surface freshwater sources, groundwater. Toxic substances, like heavy metals, oil, hormone disruptorscomes from towns and factories (municipal, industrial). Chemicals and microplastic from cleaning, hygiene and cosmetics products mostly pollute sewage water due to personal daily use. Radioactive waste is generated by uranium mining, nuclear power plants, and the production and testing of military weapons, as well as by universities and hospitals that use radioactive materials for research and medicine. **Water pollution: tips to behavioural changes towards less polluting water** ● Becoming a well-informed consumer is the first step towards fighting the cause of water pollution in your community. ● Do not pour dangerous toxic substances and objects, especially old medications, into drains ● Choose cleaning, hygiene and cosmetic products based on the toxicity of the ingredients ● Don't go swimming after applying sunscreen (UV filters are pollutant) ● Contribute to local and national water bodies, especially river cleaning campaigns and activities. ● Reduce your plastic consumption and reuse or recycle plastic when you can. ● Stop the use of single-use items **Topic 1: THE GLOBAL WATER CYCLE** The water cycle connects the lithosphere, atmosphere, biosphere and hydrosphere which built the basis for all life on this planet and also represent the limited resources upon which humankind is developing (Handl et al.,

	2020). The global water cycle consists of the oceans, water in the atmosphere, and water in the landscape. **Definitions** ***"Precipitation*** *water that falls from the clouds towards the ground, especially as rain or snow"*. https://dictionary.cambridge.org/dictionary/english/precipitation ***"Evaporation*** *process by which an element or compound transitions from its liquid state to its gaseous state below the temperature at which it boils; in particular, the process by which liquid water enters the atmosphere as water vapour in the water cycle"*. https://www.britannica.com/science/evaporation ***"Condensate*** *the drops of water that appear on cold windows or other surfaces, as a result of hot air or steam becoming cool"*. https://dictionary.cambridge.org/dictionary/english/condensation Precipitation, evaporation, freezing and melting and condensation are all part of the hydrological cycle - a never-ending global process of water circulation from clouds to land, to the ocean, and back to the clouds. According to the National Research Council's report on Research Pathways for the Next Decade (NRC, 1999): "Water is at the heart of both the causes and effects of climate change." The reserves of water in the Earth's water cycle are: ➔ World oceans, seas, bays ➔ Ice caps, glaciers and permanent snow cover ➔ Groundwater (fresh, saline) ➔ Ground ice in zones of permafrost strata ➔ Water in lakes (fresh, saline) ➔ Soil moisture ➔ Atmospheric water ➔ Marsh water ➔ Water in rivers ➔ Biological water The ocean holds 97% of the total water on the planet; 78% of global precipitation occurs over the ocean, and it is the source of 86% of global

	evaporation. Evaporation from the sea surface is important in the movement of heat in the climate system. On the land hydrological cycle includes: the deposition of rain and snow on land; water flow in runoff; infiltration of water into the soil and groundwater; storage of water in soil, lakes and streams, and groundwater; polar and glacial ice; and use of water in vegetation and human activities. Precipitation drives the hydrological cycle on the land surface. The actions of human civilization affect hydrological processes and influence the water cycle itself. These processes include the alteration of rainfall regimes via modification of urban areas, or the influences on evapotranspiration[1] due to irrigation in agriculture. **Topic 2: RIVER ECOSYSTEMS** Water flow makes river ecology different from other water ecosystems. Flow can be affected by water input from snowmelt, rain and groundwater, it can alter the shape of riverbeds through erosion and sedimentation, creating a variety of changing habitats. River flow is understood as the fundamental process determining the size, shape, structure, and dynamics of riverine ecosystems. Hydrological regimes are key characteristics of river flow which are strongly linked to habitats and biotic communities. Human activities such as water abstraction (irrigation and hydropower), dams, river channelization and land use result in changes of river flows significantly. An additional change agent for river flows is climate change. (Handl et al., 2020) Rivers and their management are critical to the supply of fresh water in many parts of the world. Rivers carry water, sediment, chemicals, and various nutrients from continents to seas. **Definitions** *“**Hydroelectric power**, also called hydropower electricity produced from*

[1] Evapotranspiration is the sum of all processes by which water moves from the land surface to the atmosphere via evaporation and transpiration

generators driven by turbines that convert the potential energy of falling or fast-flowing water into mechanical energy. In the early 21st century, hydroelectric power was the most widely utilised form of renewable energy; in 2019 it accounted for more than 18 percent of the world's total power generation capacity".
https://www.britannica.com/science/hydroelectric-power

Industrialization had large-scale effects on river uses and their impacts on morphology, hydrology, and aquatic biota. The use of fossil energy enabled intensification of uses with unprecedented ecological consequences.

Riverine impairment peaked in response to a combination of intensifying factors: increasing resource exploitation and use, a rising density of machinery in industry and private households, intensified agriculture driven by an ever increasing number of machines, as well as fertilisers and pesticides (Haidvogel, 2018).

Rivers are used to build the infrastructure required to produce hydropower. "A dam is a barrier to obstruct the flow of water and to create a reservoir." Reservoirs are built for specific community needs (according to Schmutz and Moog, 2018):
- Drinking, industrial, and cooling water supply
- Hydropower generation
- Agricultural irrigation
- River regulation and flood control
- Navigation
- Recreation and fisheries

Dam construction is known in human history back more than 5000 years. Today, there are about 6000 existing or planned large hydropower dams (>15 m height) worldwide.

Dams and reservoirs impact:

- Flow of the river
- Interruption of river continuity (longitudinal and lateral, fish migration, sediment and nutrient transport)
- Siltation of river bed and clogging of interstitial
- Homogenization of habitats
- Downstream river bed incision
- Alteration of river/groundwater exchange
- Downstream flow and water quality alteration

	• Sediments[2] transport • River connectivity **RIVER ECOSYSTEMS: Tips to behavioural changes towards more sustainable river management** • Do not through dangerous toxic substances and objects, plastics, old medications, faeces into river • Contribute to local and national water bodies, especially river cleaning, conservation campaigns and activities. • Look for representatives with well-informed renewable energy policy and who support freshwater conservation. • Advocate for your river, be aware of technical solutions that make hydro energy more sustainable (innovative technologies that help balance hydropower and river conservation). • Support local conservation groups • Demand that factories and plants clean their wastewater before releasing it into the river **WATER EXPORTS (VIRTUAL WATER) and WATER FOOTPRINT** Virtual water trade - the trade of embodied or embedded water, virtual water refers to the water contained in fibre, food (any agricultural product), and non-food commodities such as energy. "As food and other products are traded internationally, their water footprint follows them in the form of virtual water. This allows us to link the water footprint of production to the water footprint of consumption, wherever they occur. […] Virtual water flows help us see how the water resources in one country are used to support consumption in another country." https://www.watercalculator.org/footprint/what-is-virtual-water/ Virtual water content of a product is the total sum of the water used along value chain.

[2] **Sediment** is a naturally occurring material that is broken down by processes of weathering and erosion, and is subsequently transported by the action of wind, water, or ice or by the force of gravity acting on the particles. For example, sand and silt can be carried in suspension in river water and on reaching the sea bed deposited by sedimentation; if buried, they may eventually become sandstone and siltstone (sedimentary rocks) through lithification. Understanding of sediment dynamics on all river scales are among the most important issues for sustainable river management in the future.

	For example: To make pasta we need direct water - to boil the dry pasta in the pot. In order to produce the pasta, water is required at many steps along the value chain, and when the water used at those steps is added up, it makes up virtual water content for that pasta. Some of these steps include: ➔ water to grow the wheat; ➔ water to produce the fuel for machines to harvest the wheat and transport the pasta to the store; ➔ water to create the electricity for processing the wheat into flour and pasta. "The concept of virtual, or embedded, water was first developed as a way of understanding how water scarce countries could provide food, clothing and other water intensive goods to their inhabitants. The global trade in goods has allowed countries with limited water resources to rely on the water resources in other countries to meet the needs of their inhabitants. https://waterfootprint.org/en/water-footprint/national-water-footprint/virtual-water-trade/ Virtual water and water footprint can both refer to the water used to produce an item, the water footprint concept can be applied more broadly. Product's water footprint can be analysed and separated into the components of water footprints – blue, green and grey. World virtual water trade can be organised in the way that water-scarce countries or regions could grow/produce less water-intensive production and trade these productions with water-rich countries or regions. For example, a country with limited water resources imports water-intensive goods like cotton textiles rather than have local growers cultivate cotton crops at great cost to their local water conditions. Virtual water trade can significantly influence the management of international river basins, thereby influencing agriculture in the long run and also affect water management practices in regions or nations prone to water scarcity issues. For a fair virtual water trade, the worldwide maximum sustainable water footprint should be divided equally among all the nations.

	Personal water footprint calculates the water amount that a person uses on a daily basis: food consumption, domestic water use - indoors, domestic water use - outdoors, Industrial goods consumption. In our global economy, each consumer on average 'eats' as much as 5 000 litres of water every day (ranging from 1 500 to 10 000 litres per day, depending where you live and what you eat). Everything we use or consume has a water footprint, sometimes close to where we live but often in river basins far away, even in other countries. https://waterfootprint.org/en/water-footprint/personal-water-footprint/ If we want to stabilise our total water footprint, preventing its further increase, average annual consumption per person will have to decrease from 1,385 cubic metres in 2000 to 835 cubic metres by 2100, due to the projected population growth. https://www.un.org/en/chronicle/article/how-reduce-our-water-footprint-sustainable-level A cup of morning coffee consumes 140 liters of water to produce, package, and ship the coffee beans to your nearest store. Tips for consumption behaviour change to reduce your water footprint: ➔ Choose products with sustainable sourcing, production, and other features ➔ Eat local ➔ Actively conserve energy, water, and products during use ➔ Reduce, ruse, recycle ➔ Reduce meat and dairy products in your diet: to produce 1 kg of bovine meat, requires 15145 litre per kilogram. ➔ Reduce shower time ➔ Only run full loads of laundry and dishes. ➔ Fix leaky taps to reduce water loss. ➔ Use a watering can rather than hose to water your plants. ➔ Install a water butt to catch rainwater. **CONCLUSION** Water is renewable and sustainable, but there is always the same amount of water on, in, and above the Earth, due to the water cycle our planet's water

	supply is constantly moving from one place to another and from one form to another. People's responsibility is to use water in a sustainable way that leads to drinking water, sanitation, and basic hygiene facilities for all people of the world. To maintain sustainable levels of water resources, rates of water withdrawals must be below rates of freshwater replenishment. People must to rethink and change daily habits over water consumption patterns, evaluate their water footprint and water pollution while buying goods, be aware of industry, agriculture, meat production water pollution and demand that factories and plants clean their wastewater before releasing it into the river, actively participate in local, regional and national water energy decision making, water conservations, rivers cleaning campaigns and activities. Fair sharing of the globe's limited freshwater resources will be key in reducing the threat posed by water scarcity on biodiversity and human welfare. International collaboration in implementing these measures will be crucial.
References	1. Handl, S., et al, 2020. *Chapter 7: Geoethics and water management*. Teaching Geoethics. Resources for higher education. ISBN 987-989-746-254-2; doi 10.24840/978-989-746-254-2. 2. United nations. Sustainable development goals. https://www.un.org/sustainabledevelopment/water-and-sanitation/ 3. Haidvogl, G., 2018. *Historic Milestones of Human River Uses and Ecological Impacts*. In S. Schmutz & J. Sendzimir (Eds.), Riverine Ecosystem Management: Science for Governing Towards a Sustainable Future (pp. 19-39). Cham: Springer International 4. Schmutz, S., & Moog, O. (2018). Chapter 6: Dams: Ecological Impacts and Management. In: Schmutz, S., & Sendzimir, J. (Eds., 2018). Riverine Ecosystem Management – Science for Governing Towards a Sustainable Future. Aquatic Ecology Series Volume 8, Springer Open), pp. 111-127. Cham: Springer International Publishing. 5. Nasa Science. Share the science. Water Cycle. https://science.nasa.gov/earth-science/oceanography/ocean-earth-system/ocean-water-cycle 6. Oki, Taikan & Entekhabi, Dara & Harrold, T.. (2004). The global water cycle. Washington DC American Geophysical Union Geophysical Monograph Series. 225-237. 10.1029/150GM18. https://www.researchgate.net/profile/T-Harrold/publication/260072736_The_global_water_cycle/links/5f17

	98f4299bf1720d58d0eb/The-global-water-cycle.pdf 7. Science Learning Hub. River Ecosystems. https://www.sciencelearn.org.nz/resources/439-river-ecosystems 8. Reham M. Abu Shmeis, Water Pollutant, Water Chemistry and Microbiology, Comprehensive Analytical Chemistry, Volume 81, 2018, Pages 1-56,ISSN 0166-526X, ISBN 9780444640642, https://doi.org/10.1016/bs.coac.2018.02.001. 9. Palmer, M.A., Lettenmaier, D.P., Poff, N.L. et al. Climate Change and River Ecosystems: Protection and Adaptation Options. Environmental Management 44, 1053–1068 (2009). https://doi.org/10.1007/s00267-009-9329-1 10. Shiv Narayan Nishad, Naresh Kumar; Virtual water trade and its implications on water sustainability. Water Supply 1 February 2022; 22 (2): 1704–1715. doi: https://doi.org/10.2166/ws.2021.322 11. Water footprint calculator. What is Virtual Water? https://www.watercalculator.org/footprint/what-is-virtual-water/ 12. Crouch, L.M., Jacobs, H.E., Speight, L. (2021). Defining domestic water consumption based on personal water use activities. . *Journal of Water Supply: Research and Technology-Aqua* 1 November 2021; 70 (7): 1002–1011. doi: https://doi.org/10.2166/aqua.2021.056 13. Water Science School. Where is Earth's Water? 2018. https://www.usgs.gov/special-topics/water-science-school/science/where-earths-water
Interactive questions for R3	**Fill in the Blanks** To maintain _________________ levels of water resources, rates of water _______________________ must be below rates of ___________________. Rights answers: sustainable, withdrawals, freshwater. Wrong answers: needed, waste, groundwater. **True or false** Precipitation drives the hydrological cycle on the land surface

	Single choice What makes river ecology different from other water ecosystems? Rainwater Irrigation Sedimentation **Water flow** Homogenization of habitats
Keywords	fresh water, surface water, groundwater, water cycle, water footprint, virtual water, drinking water, waste water, aquifers, Aquatic ecosystems, hydropower production, riverine ecosystems, personal water consumption, hygiene, sanitation, clean water, precipitation, dams
Questions for reflection	1. In what ways virtual water trade can be sustainable? Task for students: ★ Develop a project work on the invisible water, e.g. how much water in a litre of beer, a kilo of beef, a t-shirt, etc. ★ Do the research which countries are water-scarce and which are water-rich? ★ Do the research which countries export are highly water-intensive?
Additional resources	**Useful links** 5 Major Consumers of Water That Might Surprise You https://www.seametrics.com/blog/water-consumers/ Water Use and Stress https://ourworldindata.org/water-use-stress#global-freshwater-use Our Global Water Crisis, Explained. https://www.youtube.com/watch?v=vB68xvRb2T4 Water Pollution: Everything You Need to Know https://www.nrdc.org/stories/water-pollution-everything-you-need-know Pesticides and Water Pollution https://www.safewater.org/fact-sheets-1/2017/1/23/pesticides

	Water pollution by cosmetics https://www.technology.org/2021/04/13/water-pollution-by-cosmetics/ How Your Beauty Routine May Be Polluting Our Water Supply https://savethewater.org/how-your-beauty-routine-may-be-polluting-our-water-supply/ The fight for water https://www.youtube.com/watch?v=1MZFrJPPIQ8 World's Water Crisis https://www.youtube.com/watch?v=C65iqOSCZOY The world's most polluted river https://www.youtube.com/watch?v=GEHOlmcJAEk BE.Hive: Behavioral Solutions to Water Pollution https://rare.org/be-hive-behavioral-solutions-to-water-pollution/ SCAN YOUR COSMETICS & CARE PRODUCTS FOR MICROPLASTICS https://www.beatthemicrobead.org/ Earth's Water Cycle https://www.youtube.com/watch?v=oaDkph9yQBs The Water Cycle and Water Pollution https://www.youtube.com/watch?v=mWepmhyAXYY Freshwater (Lakes and Rivers) and the Water Cycle https://www.usgs.gov/special-topics/water-science-school/science/freshwater-lakes-and-rivers-and-water-cycle#overview Groundwater: What is Groundwater? https://www.usgs.gov/special-topics/water-science-school/science/groundwater-what-groundwater Aquifer Demonstration https://www.youtube.com/watch?v=8Q7C3xrJrpw Groundwater True/False Quiz: USGS Water Science School https://water.usgs.gov/edu/activity-tf-groundwater.html

Funded by the European Union

	The dam dilemma: how to balance hydropower, rivers & people https://www.youtube.com/watch?v=BmG5OzIW5_8 The world's most polluted river https://www.youtube.com/watch?v=GEHOlmcJAEk Water for the environment and river connectivity https://www.youtube.com/watch?v=a0PSlY5Vl5s River Connectivity and Biological Complexity https://www.youtube.com/watch?v=E_aFlEBwSIk Task for students: river connections https://www.sciencelearn.org.nz/resources/460-river-connections Invisible water, the hidden virtual water market https://www.youtube.com/watch?v=h23IHDOKhZc Virtual water trade https://waterfootprint.org/en/water-footprint/national-water-footprint/virtual-water-trade/ Virtual Water Trade in the Context of Agricultural Production https://www.cropin.com/blogs/virtual-water-trade-in-the-context-of-agricultural-production Personal water footprint calculator https://waterfootprint.org/en/resources/interactive-tools/personal-water-footprint-calculator/ Water footprint of crop and animal products: a comparison https://waterfootprint.org/en/water-footprint/product-water-footprint/water-footprint-crop-and-animal-products/ Product water footprint https://waterfootprint.org/en/water-footprint/product-water-footprint/ How to Reduce Our Water Footprint to a Sustainable Level? https://www.un.org/en/chronicle/article/how-reduce-our-water-footprint-sustainable-level

Icons & related info for the hints of the PowerPoint presentation	*Please, insert here the icons and the related information that should pop-ups within the PPT as hints.*
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