

Sustainable Resource Use



Consider narrowing your video's focus by concentrating on a subtheme of your topic. Listed below are just a few of the possible subthemes for videos relating human population growth to preserving biodiversity.

Energy/Fossil Fuel Use

As our population and our economy grows, so does the demand for energy. The global population currently relies heavily on non-renewable fossil fuels for the majority (87 percent) of its energy consumption. Fossil fuels (primarily oil, coal, and natural gas) are non-renewable, carbon-based fuels that are stored in the Earth's crust. We access the energy stored inside of fossil fuels by burning them, which then releases greenhouse gases into the atmosphere, driving climate change.

Transitioning our energy consumption to renewable sources like solar, wind, geothermal, and hydropower, would lower our greenhouse gas emissions. Unfortunately, the renewable energy sector remains a small portion of our overall energy usage. The sector is growing, however; despite accounting for less than 9 percent of total electricity generation, renewable electricity contributed almost 50 percent of the growth in global power generation in 2017. As our world continues to develop and consume ever-increasing amounts of energy, switching to renewable sources could drastically reduce the effects of climate change.

Single Use Products

Many of the products that we use every day are used only once before being discarded. Some, like paper towels, are biodegradable. But many single use products (like food containers, straws, and plastic bags) are made from plastic, which does not biodegrade, and can last for thousands of years. Single use products account for over 40 percent of total plastic waste. Plastic waste creates a variety of environmental problems, impacting human and ecosystem health, particularly marine habitats, as the ocean receives more than 8 million tons of plastic waste per year. While recycling is a viable and environmentally friendly option for some plastic products, many single use products are not recyclable. Reducing the amount of single use products used in the first place is the safest way to avoid damaging the environment.

Diet

Farming and agriculture are significant contributors to climate change, causing, among other things, deforestation, soil depletion, and loss of biodiversity. One side of global agriculture, however, has a larger impact on the environment: meat and dairy production. Meat and dairy account for 83 percent of global farmland, and produce over 60 percent of agriculture's greenhouse gas emissions. Despite its large impact on our environment, meat and dairy's impact on our dinner plates is much smaller; it accounts for only 37 percent of protein consumed and just 18 percent of calories. The demand for meat and dairy products is only growing as the world continues to develop, and global demand is projected to increase by 70 percent before 2050. This growth jeopardizes our remaining wild spaces, and directly contributes to climate change.

Overfishing

Overfishing is when fish are caught at a rate too fast for the population to recover through natural reproduction. Widespread overfishing has been practiced for decades. Today, over 30 percent of the world's fisheries have been overfished, and are in need of close oversight to avoid species extinction. Overfishing results in the destabilization and degradation of marine ecosystems, as well as food insecurity for the over 3 billion people who rely on healthy fisheries as a source of protein.

Global Inequities in Consumption

Each of the 7.6 billion people on Earth consumes different amounts of Earth's resources every day. The amount of energy you consume rests, in part, on the country or region that you live in. As countries develop and grow wealthier, the resource consumption of its citizens' increases. Currently, high-income countries and new emerging economies (like China) consume large amounts of resources, including water, food, and energy. Conversely, low-income countries (like Ethiopia or Nepal) consume much smaller amounts of resources. Unfortunately, given the global nature of climate change, low- and high-income countries alike feel the adverse impacts of our warming world.

Sources

Energy/Fossil Fuel Use

<https://www.iea.org/renewables/>

<http://www.oecd.org/dev/developing-countries-and-the-renewable-energy-revolution.htm>

<https://www.nrel.gov/workingwithus/learning.html>

<https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/renewable-energy.html>

<https://www.eesi.org/topics/fossil-fuels/description>

<https://www.encyclopedia.com/environment/energy-government-and-defense-magazines/fossil-fuel-combustion-impacts>

<https://www.eia.gov/todayinenergy/detail.php?id=32912>

Single Use Products

<https://www.forbes.com/sites/grrlscientist/2018/04/23/five-ways-that-plastics-harm-the-environment-and-one-way-they-may-help/#947dce767a04>

<https://oceanconservancy.org/trash-free-seas/plastics-in-the-ocean/>

<https://www.vox.com/science-and-health/2018/7/3/17514172/how-much-plastic-is-in-the-ocean-2018>

<https://www.ehn.org/plastic-environmental-impact-2501923191.html>

Diet

<https://www.theguardian.com/environment/2018/may/31/avoiding-meat-and-dairy-is-single-biggest-way-to-reduce-your-impact-on-earth>

<http://www.fao.org/livestock-environment/en/>

<http://science.time.com/2013/12/16/the-triple-whopper-environmental-impact-of-global-meat-production/>

Overfishing

<https://www.worldwildlife.org/threats/overfishing>

<https://www.nationalgeographic.com/environment/oceans/critical-issues-overfishing/>

<https://www.edf.org/oceans/oceans-most-serious-problem>

Global Inequities in Consumption

<https://www.bbc.com/education/guides/z3pppv4/revision/4>

<https://www.bbc.com/education/guides/zywpg82/revision/2>

<https://data.worldbank.org/indicator>