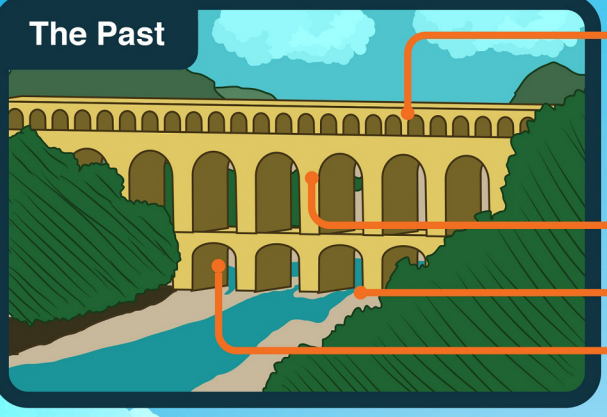
Engineering & Our Planet

Exploring the past, present and future of environmental problem-solving through science, technology, engineering and math (STEM).

The Past

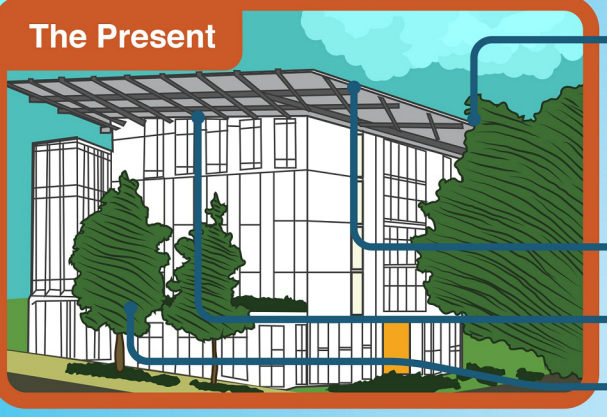


Hydrating Ancient Rome

Ancient Roman engineers built a system of tunnels and channels – called aqueducts – that used the power of gravity to carry fresh water to Rome from surrounding areas

- Carried water up to 60 miles
- Constructed between 312 BCE and 455 CE
- About 260 miles of tunnels

The Present

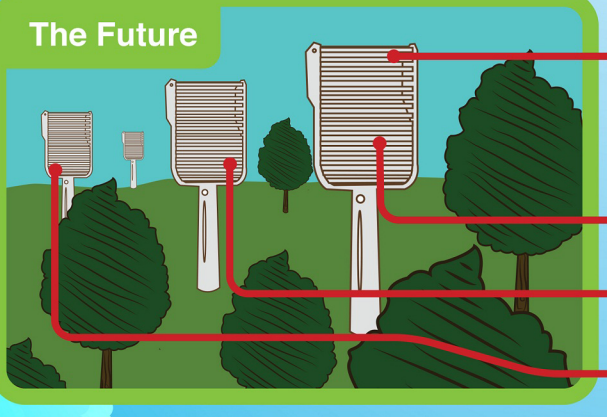


Designing Green Buildings

Seattle's Bullitt Center is one of the "greenest" commercial buildings on Earth. Not only does it provide occupants with fresh air, daylight and green space, it is also an innovative space to learn about green building technology

- 575 solar panels power the entire building
- Rainwater is collected on the roof and used throughout the building
- Net zero carbon footprint

The Future



Capturing Carbon Cleanly

Researchers are developing a device called an air extractor that removes carbon dioxide (CO_2) from the air in a process called engineered chemical sinkage. The device is playfully referred to as an "artificial tree"

- Artificial "leaves" remove about 1 ton of CO_2 per day
- Sodium carbonate on the plastic "leaves" pulls CO_2 from the air and converts it to baking soda
- Air extractor, or "artificial tree," technology could be in large-scale use in 10-20 years

Your Future in Environmental Engineering

The rapidly growing field of environmental engineering offers many opportunities for those with skills and interest in STEM to positively impact the planet

- What they do: Use science and engineering principles to solve environmental problems
- Median salary: $78,740 per year
- 59 universities in the U.S. offer accredited environmental engineering programs
- Environmental Engineering jobs are expected to grow at more than double the average job growth rate between 2010-2020

Sources:

- PBS NOVA
- Encyclopedia Britannica
- The Bullitt Foundation
- PBS NewsHour
- The Yale Forum on Climate Change & The Media
- U.S. Bureau of Labor Statistics

Find out more at **NEEFusa.org**