BMIH4011

Sustainability

Week 8

Recap week 5

Rural Tourism

Rural tourism is distinguished from urban tourism in that it typically requires the use of natural resources.

Coastal Tourism

Urban Tourism

Winter Sports Tourism

HOSPITALITY
AND
TOURISM
MANAGEMENT

Man Geni Addysg Uwch yng Nghymru
Where Higher Education Began in Wales

Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Cruise Tourism

HOSPITALITY
AND
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MANAGEMENT

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Sustainable Transportation

Traveling can have significant negative impacts on the environment and makes up to 5% of the total pollution to the atmosphere.

Local tourist spots consist of many tourists in a single place, this amounts to a lot of carbon dioxide emissions.

The vehicles used by the tourists for traveling give off many poisonous gases and damage the atmosphere.

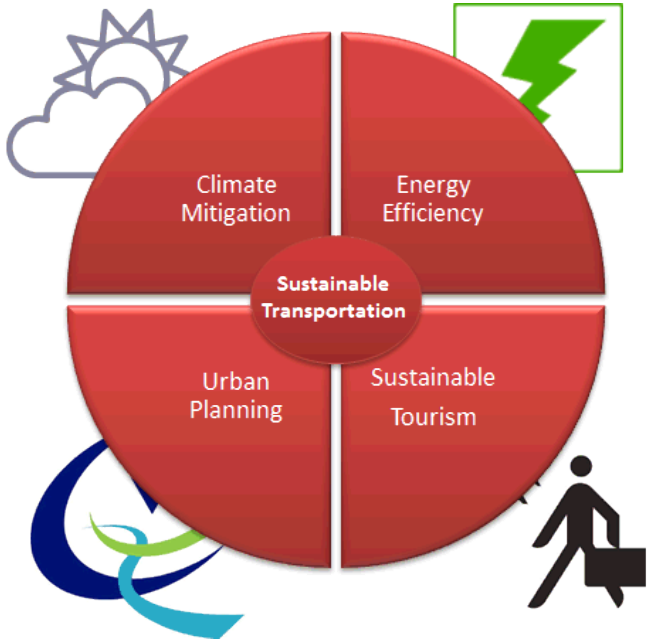
Important to look for an alternative to conventional transport that is less harmful to the environment.

The right choice is moving sustainably.

- **What is sustainable transportation?**
- Sustainable transportation consists of a green and eco-friendly form of vehicular travel to minimise damage to the environment.
  - Green vehicles that use biogas as fuel
  - Vehicles running on used vegetable oil.
  - Electric and Hybrid cars - controversial because the battery on which they run on is Lithium. **Lithium mining** is very damaging to the environment.

- Sustainable transportation also takes forms like walking, sharing a ride instead of using multiple cars for a small number of people, and cycling.

SUTD
EXPLAINS
SUSTAINABLE
Transport



Sustainable Transportation emphasises broader access to goods and services, rather than just making mobility more efficient. This would essentially provide better and more urban services closer to the user, by 'decentralizing' services to be spread out and made available in larger number of places..

Sustainable transportation would therefore manifest in the form of more pedestrianisation (with walkways and cycling routes), public transit systems than are operated on clean and renewable energy sources, bicycle station and car share options.

What is Cardiff doing?

Explore One Planet Cardiff

A sustainable transportation system takes its inspiration from that of broader sustainable development itself, calling for:

Ecological: Reduced emissions, pollution and waste, minimised consumption of non-renewable energy sources and uses technologies that reuses and recycles its components.

Economic: Affordable systems that operate efficiently. Offering a mix of transport mode choices and supports the local economy.

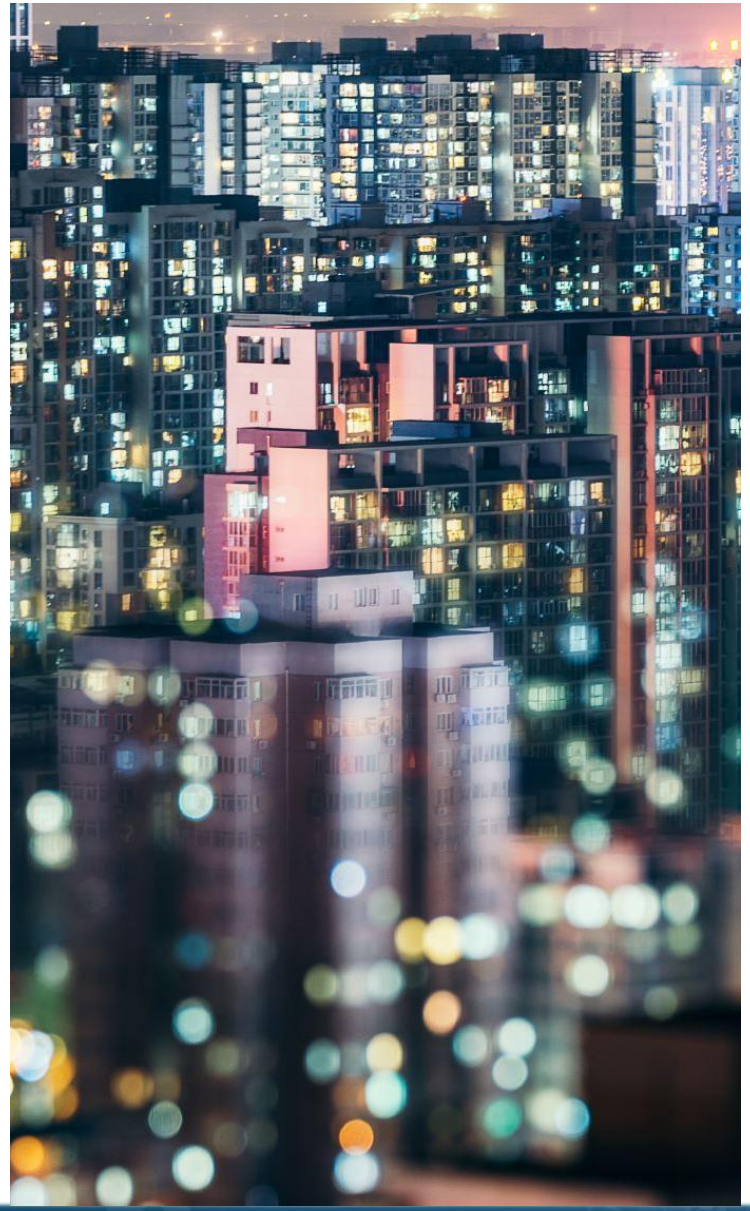
Social: Basic access needs of individuals/communities to be met safely whilst supporting good lifestyles. Aiming to provide equity within and between generations.

What about hospitality? Flying

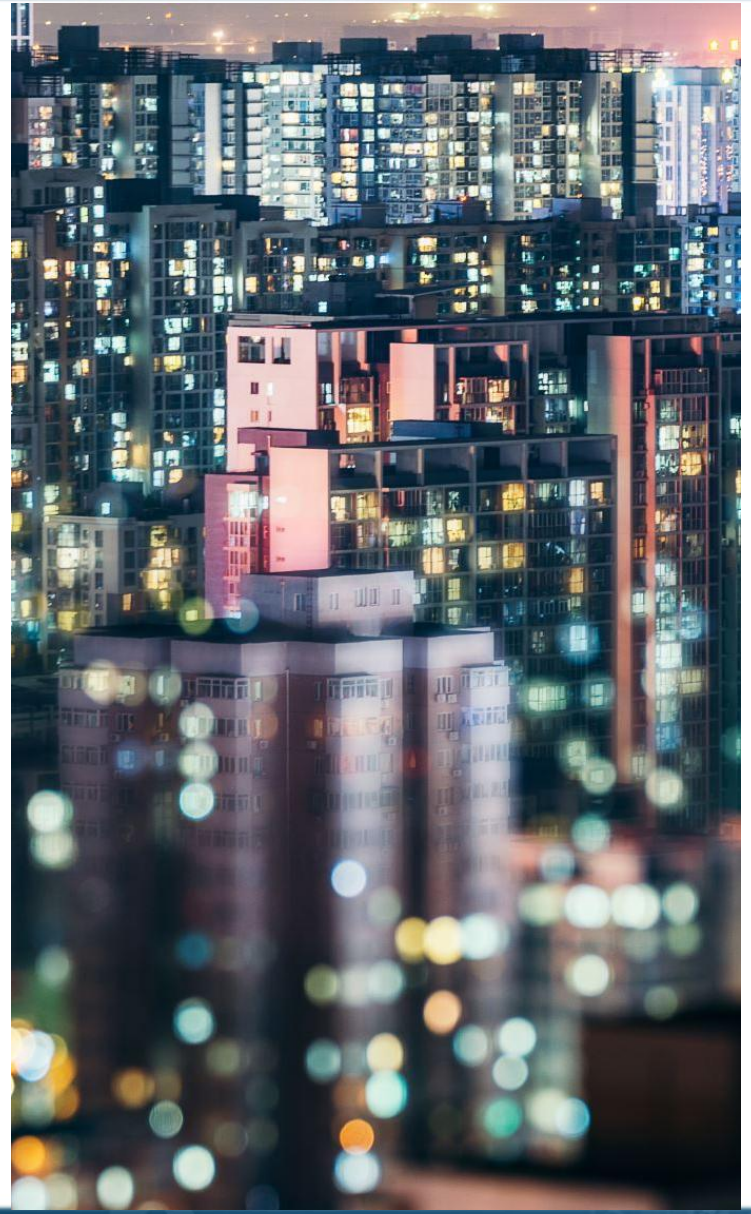
- “Around 2.4% of global CO2 emissions come from aviation. Together with other gases and the water vapour trails produced by aircraft, the industry is responsible for around 5% of global warming.

- At first glance, that might not seem like very big contribution. Except, only a very small percentage of the world flies frequently”.

Should we give up flying for the sake of the climate? - BBC Future



Urban Transportation



Group discussion: Urban Transportation

- What are the most common forms of transport in urban areas?
- How environmentally-friendly are they?
- What about congestion charges and ULEZ (ultra-low emission zones)?
- Consider how do **tourists** travel in these areas? What are their options/choices….?

Tourism transport options…?

- Taxis, Uber etc
- Buses, train, trams
- Electric vehicles?
- Horse-drawn buggies
- Rickshaws
- Bikes
- Walking

Riding a bike emits **0g** of CO_2, but this fails to account for the environmental impact caused when producing the bike and transporting a whole fleet of them to their final location.

Public transport overall is generally considered to be one of the better options when it comes to reducing the negative environmental impact of urban mobility.

Taking a bus, even if it runs on diesel, as the many still do, is much better than taking an electric car or taxi. The problem is **it's rarely the transit mode of choice** for the typical commuter

Electric scooters

- Compared to the greenhouse gas emissions of a regular motorcycle, which average 107g/km CO2, a shared electric two-wheeler is the better choice. They're also lighter and consume less energy than electric cars, and they have 30x the battery capacity.

- With dockless shared e-bikes, you run into similar problems as with shared bicycles – people will misuse them. This causes the lifecycle of an e-bike to be dramatically reduced versus a personal o needing to be replaced more often and having a larger eco impact.

E-SCOOTERS

Avg CO_2 per km:	80g *
Avg passengers:	1.1
'Green' grade:	B–

* **Source:** (CO2 calculated per lifecycle) https://www.sciencedirect.com/science/article/pii/S1361920915001315

Electric Cars

- Compared to gas-guzzling internal-combustion-engine cars, electric vehicles are leading the charge to environmentally-friendly mobility. But how much of this public perception is reality, and how much is ‘greenwashing’?

- While EVs are being marketed as the zero-emissions, sustainable alternative, the reality isn’t as black and white. The process of mining **lithium** to produce EV batteries is quickly becoming an irreversible environmental catastrophe, which begs the question: is the grass always greener on the other side?

ELECTRIC CARS

Avg CO_2 per km:	38g*
Avg passengers:	1.2
‘Green’ grade:	C

* Source: https://www.delijn.be/en/overdelijn/organisatie/zorgzaam-ondernemen/milieu/co2-uitstoot-voertuigen.html

INSIDER | TRUE COST

Let the train take the strain?

- Trains, trams, metro, subway, underground, tube – there are a lot of differences among these vehicles like capacity, speed, energy efficiency, engine type, and so on that can influence their environmental impact, so the numbers below are only meant to reflect the broader category of railway transit.

- Zooming out to the larger mobility landscape, **traveling by rail-based public transport removes cars from the road, lowers emissions and is cheaper than personal vehicles. Not to mention that the majority of trains in Europe already run on renewable energy.**

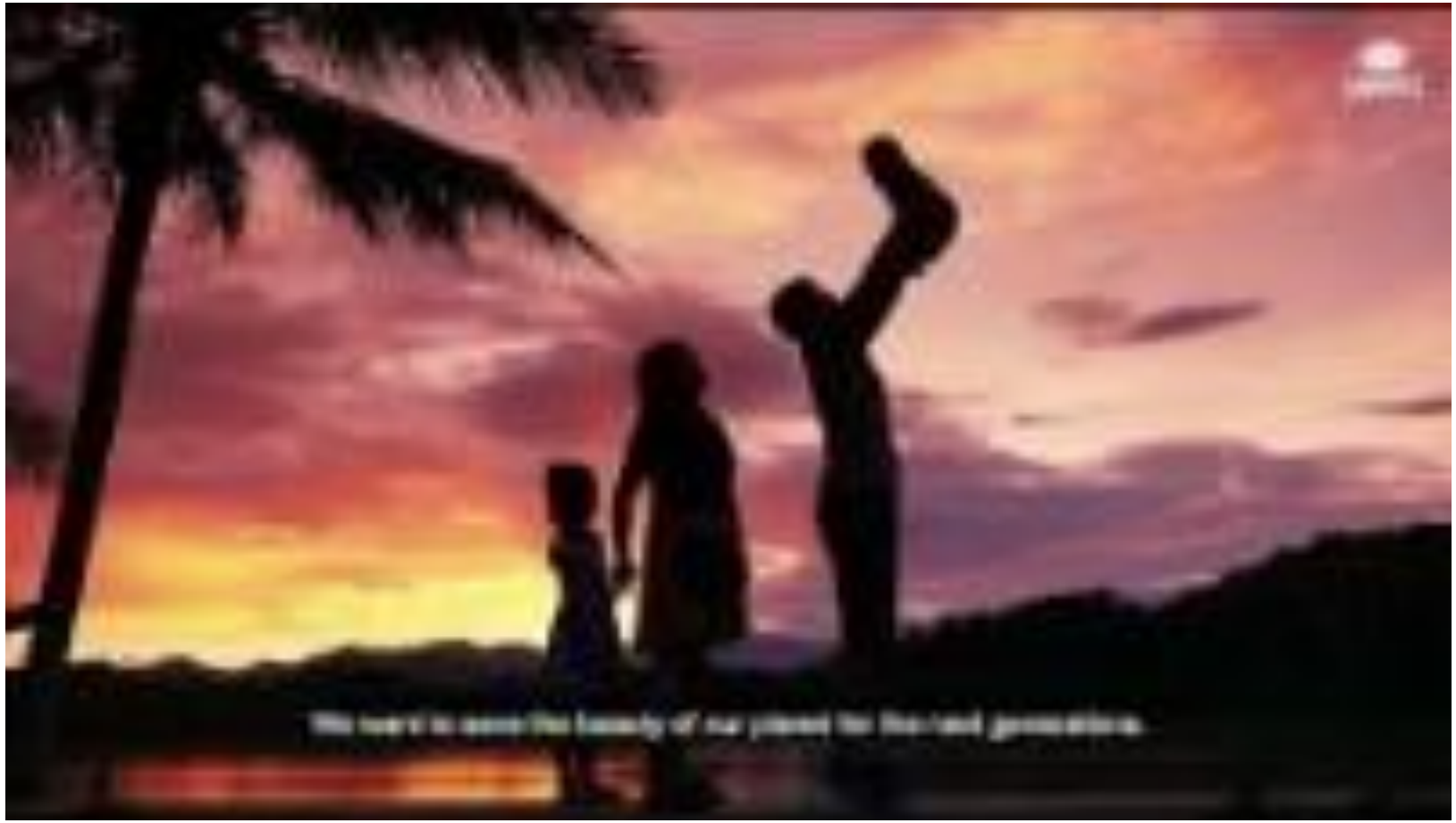
TRAIN

Avg CO_2 per km:	28g *
Avg passengers:	60
'Green' grade:	A

* **Source:** https://www.delijn.be/en/overdelijn/organisatie/zorgzaam-ondernemen/milieu/co2-uitstoot-voertuigen.html

So, which one is the winner?

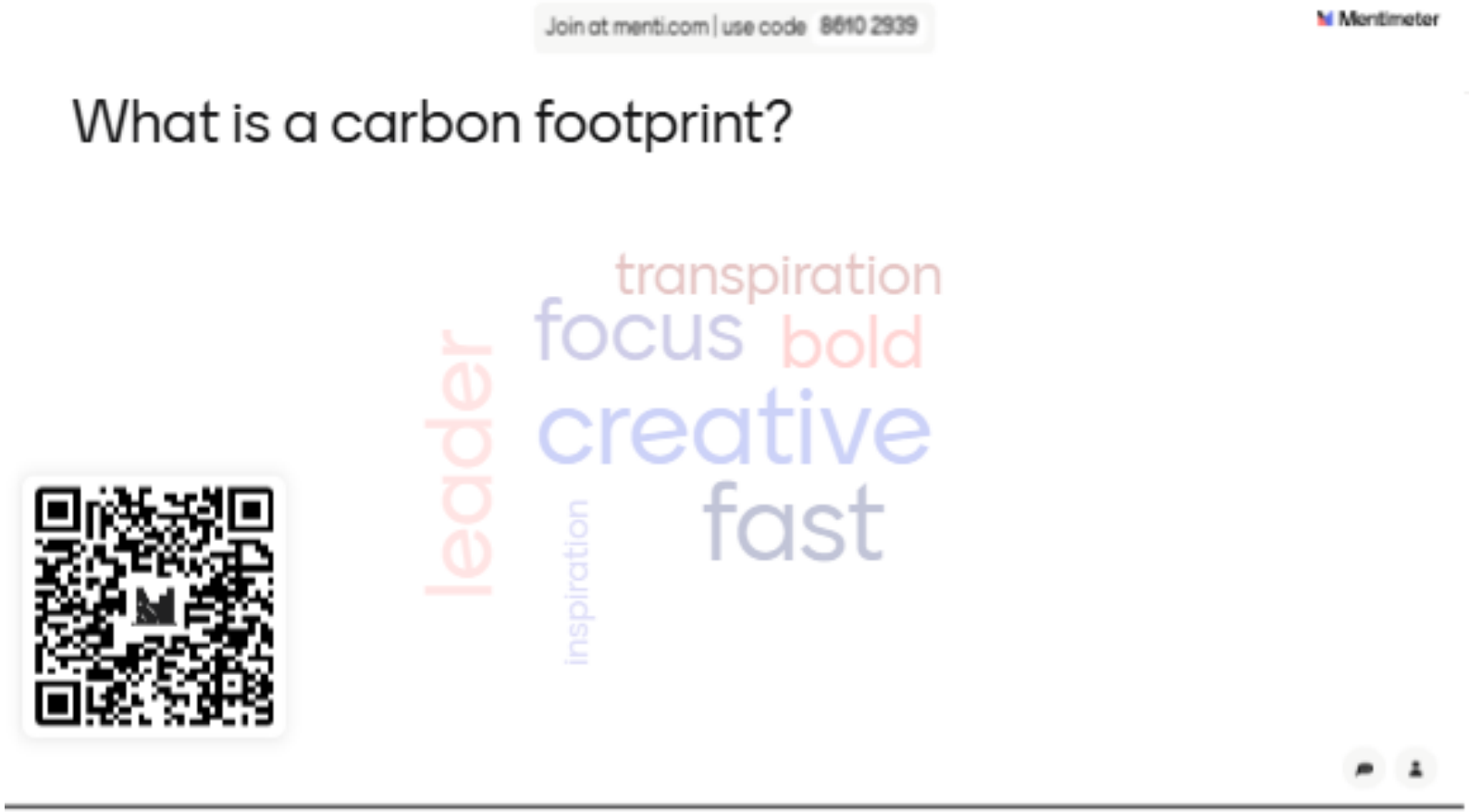
- The most environmentally friendly mode of transportation is clearly **walking**, with other forms of public transport in second and third place.
- But realistically, the answer is not so simple. Every human on earth has an individual and multimodal travel chain.
- It's (almost) impossible to find a person who only uses a single mode of transport in a week, let alone a month, a year, or a lifetime.



What do you think will be the future of international tourism travel?!
Is it still too early to tell?

The Economist
THE FUTURE OF TRAVEL

Sustainability: Carbon Footprint & Overview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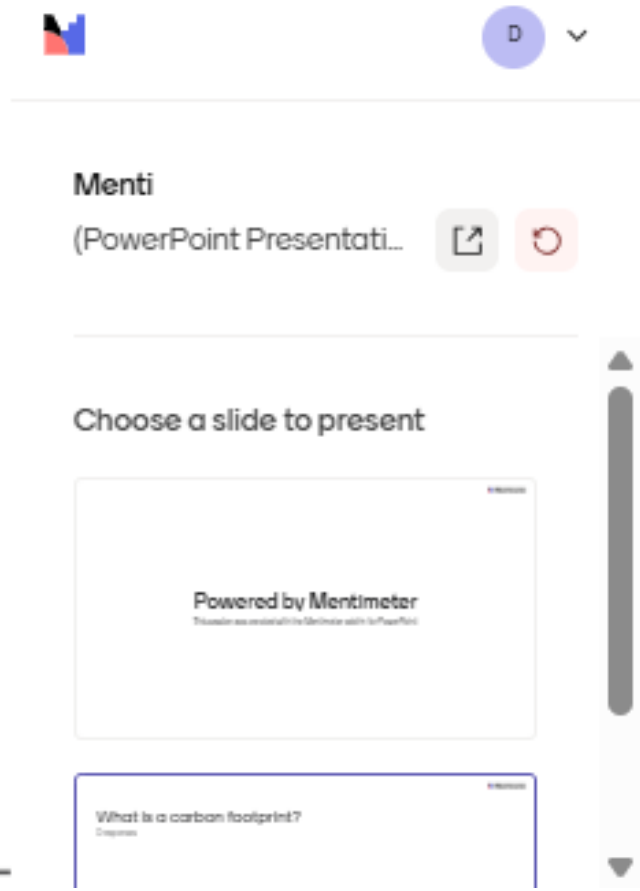
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What is a carbon footprint?

BBC
BBC NEWS

TRENDING

Taylor Swift claims she offsets her travel carbon footprint - how does that work?

(Image credit: Getty Images)

POWER PLAYERS

Why billionaires like Bill Gates and Jeff Bezos buy carbon offsets — and how they work

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Tom Huddleston Jr.

SHARE

How e2open and Accenture partnering to build resilient chains

Prince Harry and private jets: What's the carbon footprint?

20 August 2019

Climate

Carbon offset schemes allow individuals and companies to invest in environmental projects around the world in order to balance out their own carbon footprints.

The projects are usually based in developing countries and most commonly are designed to reduce future emissions. This might involve rolling out clean energy technologies or purchasing and ripping up carbon credits from an emissions trading scheme.

Other schemes work by soaking up CO_2 directly from the air through the planting of trees.

SkootEco

SCAN ME

BBC NEWS

Some people and organisations offset their entire carbon footprint while others aim to neutralise the impact of a specific activity, such as taking a flight.

To do this, the holidaymaker or business-person visits an offset website, uses the online tools to calculate the emissions of their trip, and then pays the offset company to reduce emissions elsewhere in the world by the same amount – thus making the flight "carbon neutral".

Some conclusions….?

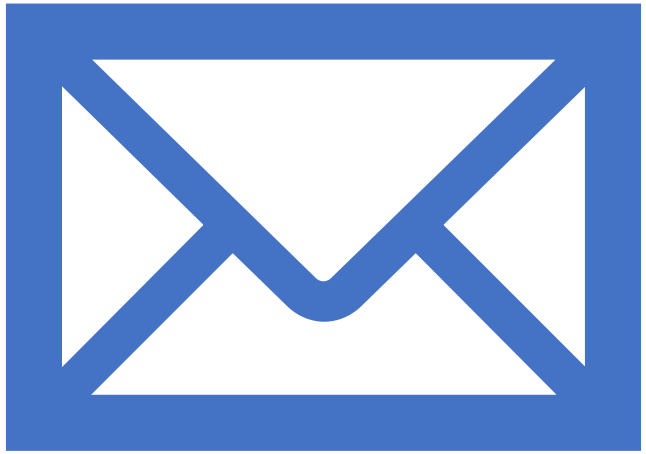
- The **sustainability of our natural environment** has become an important and urgent matter not only to governments but to many companies as well.

- As sustainability is about meeting the needs of the present without compromising the ability of future generations to meet their own needs, a **long-term and holistic approach** is required for businesses to become more sustainable.

- The natural environment should not be perceived as something to be extracted and used as much as possible in order to maximise profit. Instead, it should be viewed as a major stakeholder.

Recap

I look forward to seeing you next week.



If you have any questions in the meantime, please send an email from your student account

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