

# Warrington BC

## APSE

### A commercial approach to public sector clean energy investment 2022

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Change

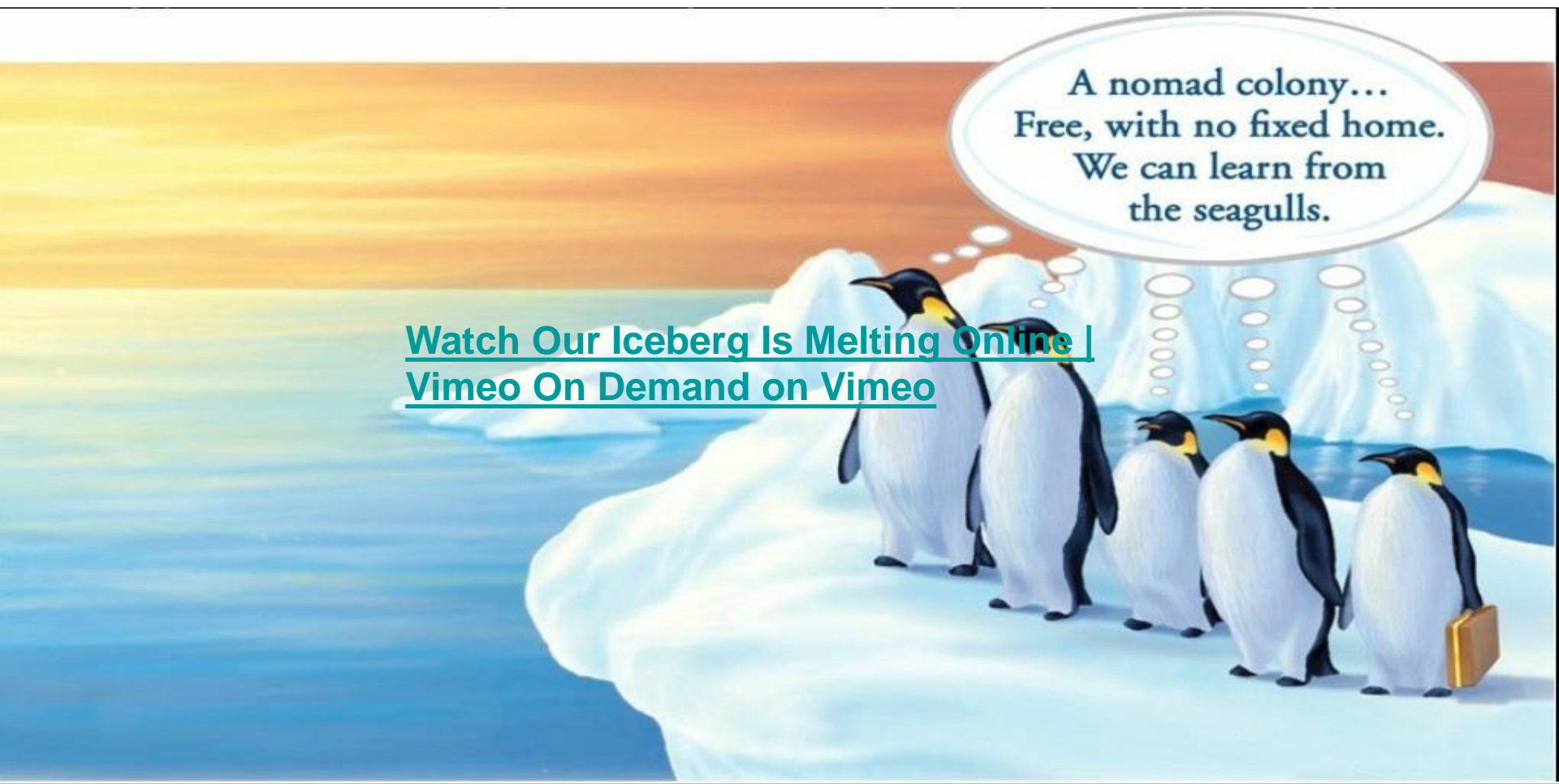


# Overview

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- Why
- Solar Investments
- Risk Management
- Future
- Key Ingredients

# WHY



A nomad colony...  
Free, with no fixed home.  
We can learn from  
the seagulls.

[Watch Our Iceberg Is Melting Online |  
Vimeo On Demand on Vimeo](#)

# Solar Farms





# Risk Management

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- Climate change risk management has been projected as conscious transformation at unprecedented scale and speed involving a contest of ideas and experimentation across scales of authority and jurisdiction (Hildén et al. 2017; Laakso et al. 2017; Gordon 2018; van der Heijden 2018; Kivimaa et al.
- Climate change risk assessments face challenges including a tendency to mis-characterise risks and pay insufficient attention to the potential for surprises (Weitzman 2011; Aven and Renn 2015; Stoerk et al. 2019).
- The National Audit Office (2021) Climate Change Risk: A Good Practice Guide for Audit and Risk Assurance Committees deals with managing climate change risks.

# Horizon Scanning



# Carbon Offsetting

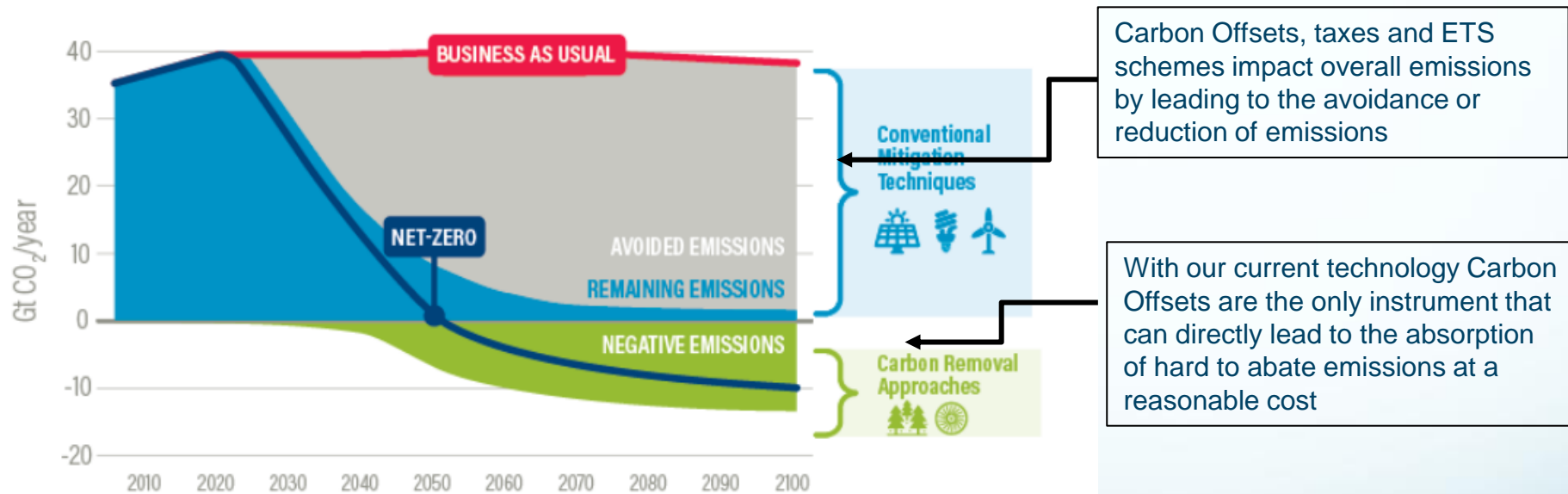
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**The International Carbon Reduction and Offset Alliance (ICROA), defines offsetting as follows:** “In simple terms, carbon offsetting is a mechanism used to compensate for corporate or individual carbon footprints through the purchase of carbon credits issued by accreditation standards to projects that remove greenhouse gas emissions from the atmosphere or avoid generating the emissions in the first place. Each credit is equal to one tonne of CO<sub>2</sub>(e) that has not been emitted. Once purchased, the credit is then retired through an internationally recognised and publicly viewable registry.”

# Carbon Offsets | An Indispensable Tool to Achieving Net Zero

**Carbon removal is the only avenue to achieve Net Zero**

Staying Below 1.5 Degrees of Global Warming



Source: Adapted from IPCC 2018.  
20.05.20

 WORLD RESOURCES INSTITUTE

**Net Zero is only possible with the use of offsets**



# Demand – side Catalysts

**The huge increase in pledges by organisations to achieve net-zero means demand is likely to dwarf current inventories in offsets by the early to mid-2020s, potentially much earlier due to the lag of new offsets coming online and being approved**

Microsoft will be carbon negative by 2030

Jan 16, 2020 | [Brad Smith - President](#)

**PwC commits to net zero by 2030, globally**

15/09/20

**Facebook and Google announce plans to become carbon neutral**

**Firms join Apple and Microsoft in committing to put no excess carbon into the atmosphere**

**Press release**

The Climate Pledge Announces More Than 100 Signatories Committed to Achieving Net-Zero Carbon by 2040 or Sooner

April 21, 2021 at 10:08 AM EDT

**Press release**

Amazon Becomes World's Largest Corporate Purchaser of Renewable Energy, Advancing its Climate Pledge Commitment to be Net-zero Carbon by 2040

December 10, 2020 at 6:00 AM EST

**PRESS RELEASE**  
July 21, 2020

**Apple commits to be 100 percent carbon neutral for its supply chain and products by 2030**

Total adopts a new Climate Ambition to Get to Net Zero by 2050

The EU aims to be climate-neutral by 2050 – an economy with net-zero greenhouse gas emissions. This objective is at the heart of the [European Green Deal](#) and in line with the EU's commitment to global climate action under the [Paris Agreement](#).

**Press release**

Best Buy, McKinstry, Real Betis, Schneider Electric, and Siemens Sign The Climate Pledge

**World's first certified, carbon neutrally produced oil sold**

26 April 2021

Lundin Energy AB (Lundin Energy) is pleased to announce that it has sold the world's first ever certified carbon neutrally produced<sup>1</sup> oil to Saras S.p.A (Saras), from its Edvard Grieg field, offshore Norway.

# Carbon Offset Fund

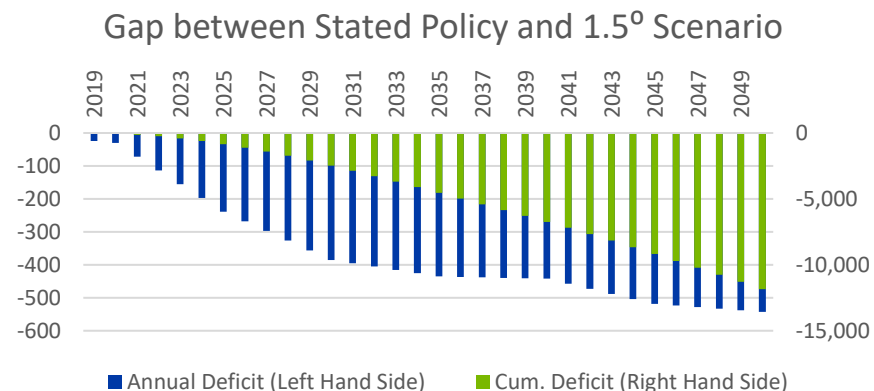
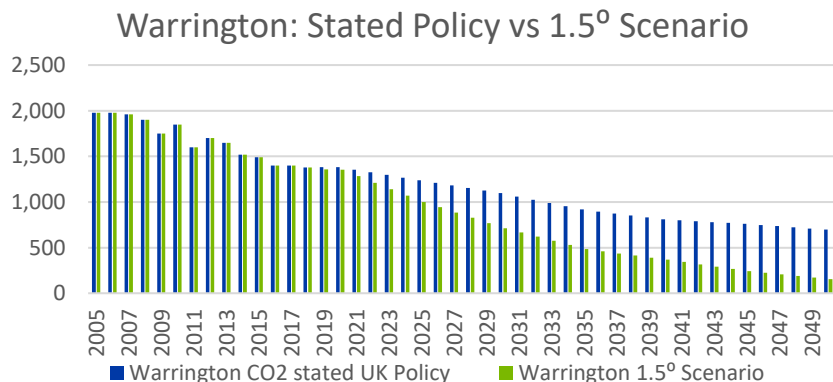
High quality carbon offsets offer an essential tool to assist in achieving ambitious climate targets

- Establish a contingency pool in case other policy initiatives fall short of goals or central government delegates more responsibility to local government
- Warrington Borough Council (WBC) demonstrates leadership among local authorities by applying a cost-effective climate strategy
- Can be offered to local businesses and households to help credibly manage hard to abate emissions
- Provides highly attractive returns to local authority pension funds while bringing investment policy in line with climate goals

**Carbon Offsets received a strong endorsement at COP 26 and are part of the toolkit to achieve the UK's Nationally Determined Contribution (NDC) as part of the Paris Agreement process**

- Framework for using carbon offsets across borders to meet national obligations is put in place
- Double-counting to be avoided through so called Corresponding Adjustments
- Pathway towards improved standards and better transparency firmly in place
- Effectively sets a floor under carbon offset prices for the foreseeable future

# Carbon Offset Fund



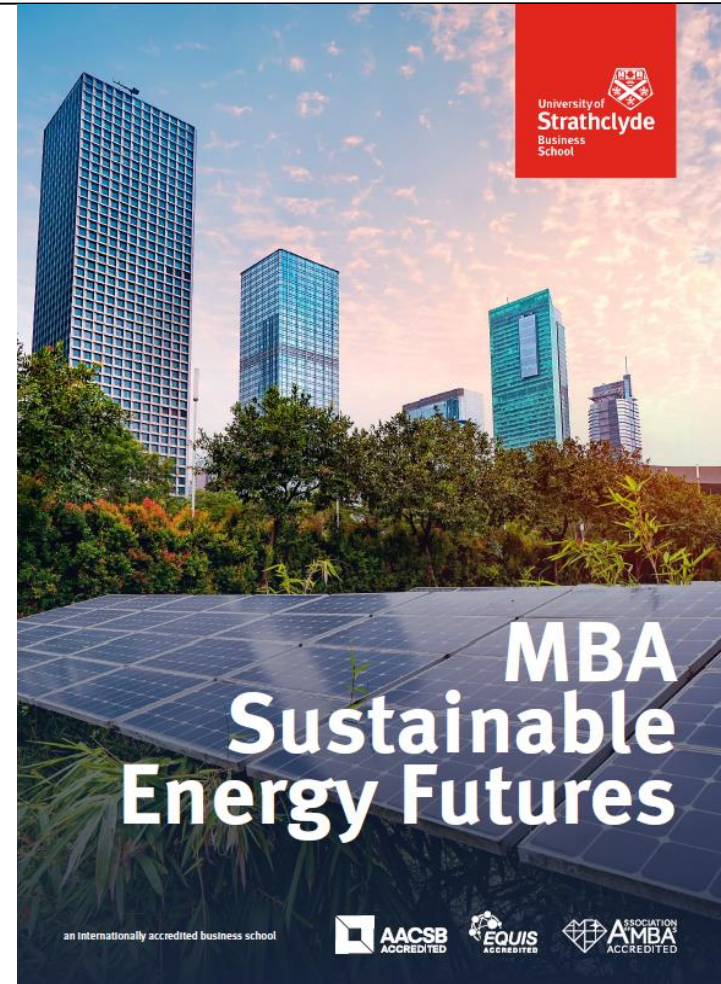
*Sources: Developing a local strategy for Warrington in the face of the global climate emergency, Position Paper 2021, Climate Action Tracker UK Country Model as of 14 September 2021, Altana calculations from historic data and UK country model while keeping Warrington's proportion of UK emissions constant*

- We compare WBC's CO<sub>2</sub> emissions profile to the required level of emissions needed to meet a 1.5° scenario
- It is apparent that under current policies there is a growing emissions gap between what needs to be achieved and the current path
- Carbon budgets run the risk of being exhausted in the next 10 years without swift action
- Using current prices of £ 10 per ton of CO<sub>2</sub> for voluntary carbon offsets this is a cumulative £120m liability with up to £6m directly attributable to WBC
- However as prices rise, which is our base scenario this liability can become significantly higher
- It is our view that high quality carbon offsets are an essential protection

# MBA Sustainable Energy Futures

***“The sector is facing some of the greatest challenges of our time. At such a time organisational leadership is key to driving change and responding to the grand challenges faced across the energy ecosystem”***

- Prof. David Hillier, Vice Principal & Executive Dean,  
Strathclyde Business School



# Green Finance

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- Community Municipal Investments
- Treasury Management
- Green Bonds / Green Finance



# Key Ingredients to Innovation

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**Responsible leadership**, as the Global Responsible Leadership Initiative (GRLI) sees it, is leadership that understands the value of, and need for, collective action to achieve net zero. In contrast, our organisations need leaders who can innovate, think critically and who are self-aware. Leaders able to address climate change and sustainability challenges need to be **bold to take action**. They need **courage to commit** to this new leadership paradigm and transform the organisational behaviours and structures of today. We need to be better at creating a capacity within and among business leaders for critical self-reflection. Recognising and encouraging diversity in leadership is essential.

**Culture - Iulia Georgiana Ene** (2021) identifies developing a culture of sustainability generally begins by having a clear [sustainable strategy](#) and making sure sustainability is a key focus in everything the organisation does and stands for. On top of that, it is critical that all employees understand what sustainability is and its synergies with the organisations activity and their work.

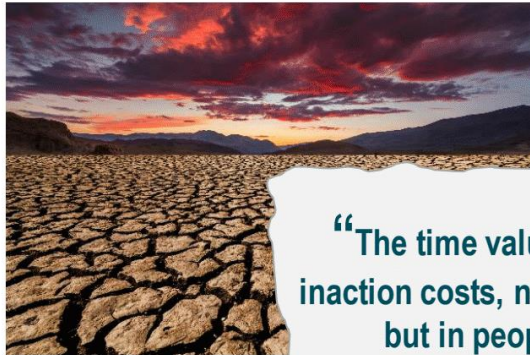
# Key Ingredients to Innovation

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**Systems Based Thinking** - The Systems Perspective for Managing Climate Change (2021) report from the Intergovernmental Panel on Climate Change (IPCC) recognises the importance of systems based thinking to solving the climate change challenge.

**Risk Management**

**In conclusion**  
Why now?



**“The time value of impact...  
inaction costs, not just in money  
but in people’s lives.  
Time matters.”**

*Amit Bouri, GIIN CEO*







# Q&A

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## **Danny Mather**

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