



Meeting Notes
Climate Opportunity Ideas Factory
**How can international collaboration drive forward
our green economic future?**

**Chaired by Dr Martin Valenti,
Director for Net Zero at South of Scotland Enterprise**

Wed 3 Nov 2021 3pm for a 3.30 start – 6pm
Venue: 5th floor, PWC, 141 Bothwell St, Glasgow G2 7EQ



Agenda

3.00—3.30 - Delegate arrival and networking over coffee

3.30 - Introductions

- Welcome from PwC (hosts) and Dr Simon Gage OBE, CEO, Edinburgh Science.
- Setting the scene: Meeting Chair, Dr Martin Valenti, Director Energy Transition and Green Enterprise for SOSE, and Edinburgh Science Board Member

3.40 - Provocation from Cristiana Figueres (by video link)

3.45 - Net Zero and Scotland's Economy: Ms Kate Forbes MSP, Cabinet Secretary for Finance and the Economy

- Address will be followed by Q&A and discussion

4.20 - Accelerating investment in solutions to climate change: Paul Dickinson, Founder of CDP Global

- Provocation will be followed by Q&A and discussion

4.50 - Ideas Factory discussion: Dr Martin Valenti leading discussion, including areas such as:

- How can international collaboration drive forward our green economic future?
- How do we create a green economic system to operate within sustainable environmental boundaries?
- How can we lead the drive to Net Zero, and share Scottish innovation internationally?
- What are our responsibilities at a global scale: how can we lessen the impacts of climate change on less developed countries?
- What role do international organisations play in sharing knowledge and innovation between countries?
- Ideas and actions
- Conclusion

5.25 - Closing of official meeting and thank you: Hannah Schlesinger, Director of Development and Marketing at Edinburgh Science

5.30 - Refreshments and informal networking

6.00 - Meeting closes.

How can international collaboration drive forward our green economic future?

The plenary meeting focused on collaborating internationally to achieve a world where zero carbon technologies make the most business sense to investors, and where no organisation or individual gets left behind.

Welcome from David Marriage, Partner at PWC

Welcome from Dr Simon Gage, CEO of Edinburgh Science

It's important to be responding in the right way to build a better world. There are few sceptics left.

The Climate Opportunity Ideas Factory was initiated by Christiana Figueres in 2019. Ideas from meetings include a national carbon bank that has led to the idea just launched by the Scottish Government, and the operational NetZeroToolkit. Edinburgh Science makes ideas happen.

Welcome from meeting Chair Dr Martin Valenti, South of Scotland Enterprise's Director for Net Zero

This is not a talking shop but an ideas factory. Factories are places where things get built and very often innovate around mass scale solutions and that is exactly what is needed to address the climate & nature crisis. In this room, we must collaborate like never before if we have any chance of delivering climate solutions because it is abundantly clear there is no single business, government or agency that can do this alone.

Whilst all eyes are on Glasgow! We need to show we can solve big challenges by having great ideas and we need to be on our toes and not on our knees crumbling under the pressure of the task in hand. This level of leadership requires us to think big, act fast, be collaborative and fearless in our endeavors. Previous COPs failed to reach meaningful agreements because of the combative nature of wasting time finding who to blame for causing climate change and in Glasgow we will focus on finding who we can work with to solve some of these issues. That's the right thing to do and the world is expecting Glasgow and Scotland to show bold and relentless bravery.

At COP 21 in Paris Christiana Figueres changed the narrative from outrage to optimism and the talks focused on what do we have to gain by collaboratively tackling climate change. So was born the Paris Climate Change Agreement. The opportunity now in Glasgow at COP 26 is to take what was agreed in Paris develop some fantastic ideas and activate activate activate - to paraphrase Christiana.

Video address from Ms Christiana Figueres

"We are now on an accelerated path, because at 2030 we have to be at one half emissions of everyone. Every city, every country, every family, every corporation, one half emissions by 2030. So that means accelerate, accelerate, accelerate. But how wonderful that you have already started along this and I have full trust that you will continue to accelerate."

We have the money, wisdom, courage and collaborative spirit to achieve this.

Address from Ms Kate Forbes MSP, Minister for Finance and the Economy

- There is an intoxicating atmosphere of optimism and hope in Glasgow. Scotland has everything it takes to show international leadership so we must ensure that the rhetoric is matched by the action.
- We know what the objectives are. What we need now is meaningful actions.
- Young people around the world want to use their skills to help companies achieve their contribution to Net Zero.

- Solutions could be pioneered here in Scotland. Scotland has a history of innovation and ingenuity, and natural resources, and we must look to share these beyond our own borders. We have a stake in the Net Zero 2045 goal no matter what political parties come and go.
- Our emissions have halved since 1990 – because we have invested in opportunities.
- We need to collaborate to ensure that the transition is just. We must consider how we finance our new opportunities to lead the way for people to make the most of opportunities of the future. We can't have a repeat of the 1980s.
- None of us in isolation have the answers to this multi-faceted problem.
- We can macro-plan. We have talent, resources, academia and decades of investment in the energy sector which will enable the transition we need to make.
- 85% finance for Net Zero ambitions must come from the private sector. It is a challenge for the government to consider all investment required, but government can make it easier to ensure that investable propositions are here in Scotland. Our national investment bank can help leverage private finance. Internationally mobile capital looking for an ethical home can easily choose Scotland.
- We can't do this in isolation. NOW is the time for a public-private partnership.

Questions for the Minister and resulting discussion: summary

- Are we ready to get our share of the investment?
- Capital is not going to wait around to get its act together. Current propositions are viable and deliverable. The Government's responsibility is to remove blockages to financial investment and innovation, so guidance from industry leaders is important for politicians.
- The shipping industry is responsible for 3% of global emissions – but 150 investors have said no to a ship that runs on wind because the size of investment is too small. So how to move this forward
- Appetite for risk and mechanisms for accessing funding must be increased.
- Climate activists need to join with oil and gas to build trust – and oil and gas needs to show its commitment to the transitions. If we have to use oil and gas, then using Scottish oil and gas is much better as we can produce it by cleaner methods and don't have to use additional fuels to import it.
- What if buildings were bound by local authorities to reduce their emissions? You could ask companies to pledge to join a district heating scheme in return for a tax incentive- lining up the ducks for investment in the technology because there would be a demand.

Address from Paul Dickinson, Founder of CDP Global

- People took enormous risks industrialising, as we see here in Glasgow, and as we move our industries from carbon to clean, the opportunity is to take risks of an equivalent size. There is something holistic about what can be achieved in Scotland, so it's great that we have talked about shipping, refurbishing, sequestration and clean gas.
- Scotland is a pioneer in **renewable energy. EVs and transport.** There is much more to transport than we think. **Energy efficiency. Food science** and thinking beyond meat. **Dematerialisation.** Is Scotland the Silicon Valley of climate change?
- Equity is part of this. We need to direct tax incomes to poorer people. What will societies of future look like? Will we see localisation due to the technology that we have?
- We need to bring the change to the economic system into policy for Scotland. It's fascinating for us to look at other models of societies, for example those of the [Findhorn Foundation](#). Here they respond to challenges as a community. Denmark is also a good example - back when their electricity was cut off by Nazi Germany, they collaborated and built lots of wind turbines.
- As investors etc., we feel unable to communicate our inner voice and therefore the market can't respond – how do you create collective voice of community?

Questions for Paul and resulting discussion: summary

- Community participation is key for a more localised future, which is key for behaviour change - 20-minute neighborhoods need to be a feature. We in Scotland don't engage with our political system in a way that gives us a collective voice. Need to localise systems to provoke behavior change.
- How do you get collective ambition that is purposeful but brings together civil society investors and locals, and how do we create a new model for collaboration across those areas?
- We can take ownership of where our money goes. But how can we communicate better around this? We can fund the planting of billions of trees – but it's nothing compared to the money being used to drive deforestation. Don't need to find loads more money, but as companies we should direct the money we have already got.
- We need an investment framework, a common set of metrics, where we can say "this is what we care about as investors". We need to make people and businesses aware of their power. People don't know how they can measure and compare the green finance credentials of different companies.
- Regulation and lack of demand prevent capital from flowing. In theory, you could have a decarbonisation preference setting on the phone which helps guide you on where you shop.
- So, to accelerate - finance needs to take more risks, and public and businesses need more guidance in how to invest according to their values. Could Scotland become the home of ESG – can we make a business dividend for doing a business in Scotland?
- We now consider more value factors than money. If we can measure things that are non-financial in the same way, we can unlock enormous power.
- A barrier is the lack of standards in carbon reporting. Scotland is a good financial centre – but how do you benchmark a higher quality investment in carbon? Needs standards and regulations.
- Can we mobilise as we did with the Covid response – less repetition in economy and much more delivery
- Market requirements are changing toward "save the planet." Boards changing to take sustainability into account. BUT markets are optimized for the previous ask – high return, low-risk financial investment. Finance sector doesn't have the data on consumer requirements, supply chain etc. to enable transparency on the demand side and create the new response from the market. By doing the right thing, your share price would go up – you need to shift the thinking. That is where we need to bring together values of people who are investing. Scotland way of thinking! World coming back to Adam Smith.
- We do not have time to change our system so we need to start putting an appropriate price on carbon. It's not the smack that's more impactful, it's the threat of the smack. For example GlaxoSmithKline has been pricing CO2 at £150/tonne.
- We can use money to make people stop and think about the choices they are making, for example the 5p plastic bag charge. This has shown that money can do things that aren't purely connected to its value, but give a prompt to listen to your inner self.
- We need to start from where we want to go – our vision of the future – and work back. Get people talking about that at all levels of society.
- But we need to be fair to people and we can't survive on a non-financial measure hence low risk pension funds. However, perhaps in a few years' time we will see that the fossil fuel investments were the real risk.

Scotland: Capitalism 2.0.

Possible action points

- A scheme for public engagement:
- Regarding the impact of finance, to empower individual (retail) investors to have an impact on the development of marketable green technologies.
- This could involve having a decarbonisation preference setting on a smartphone, which helps guide you on where you shop.
- A new model for collaboration, that brings together investors, locals, the public sector and businesses. This would fast-track innovation at the rate we need it:
- Policy mechanisms need to be geared toward making green actions pay; governments need to engage with businesses to remove blockages to progress.
- We could encourage businesses to pledge to adopt a technology – for example district heating – when it becomes available. This would create demand certainty for investors and innovators.
- De-risking green investments:
- Can we start with a vision of the future and work back?

Delegate List

First Name	Surname	Job title	Organisation
Kat	Bruce	Founder	NatureMetrics Ltd.
Colin	Carmichael	Director (Technology, Data Analytics)	PWC
Stewart	Cummins	Partner	PWC
Paul	Dickinson	Founder & CEO	CDP Global
Kate	Forbes	MSP	Scottish Government
Simon	Gage	CEO	Edinburgh Science
Diane	Gilpin	Founder & CEO	Smart Green Shipping
Jason	Higgs	Partner	PwC
Lisa	Johansson	Green Economy Investment & Finance Liaison	Green cape
Bobby	Kane	CEO	Autonomous IOT
Sandy	Kenedy	Director	ScotFIN
Valentina	Kretzschmar	Energy transition Director	Cairn Energy
Kirsty	Lieberthal	Customer Experience Strategy Manager	M & G
Steven	Lindsay	Managing Director	Reblade
Kevin	MacLennan	Associate	Mott Macdonald
Stephanie	Maia	Communications officer	Edinburgh Science
David	Marriage	Partner/ Global Head of Disruption and Innovation - Asset and Wealth Management	PWC
Andy	McDonald	Head of Low Carbon Transition	Scottish Enterprise
Sean	McGrath	CEO	Entrepreneurial Scotland
John	Obrien	Partner Energy Transition and Decarbonisation	Deloitte
Stefanie	O'Gorman	Director Sustainable Economics	Ramboll
James	Oliver	Head of Marketing	Hampden group
Jason	Ormiston	Head of External Affairs	NatureScot
David	Pearson	Group Sustainable Development Director	Star Refridgeration
Lisa	Petzold	Deputy Cultural Attache	US Embassy Small Grants Programme
Michael	Pye	Investment analyst	Baillie Gifford
Keith	Robertson	Associate, Climate and Sustainability	ARUP
Lynne	Ross	Strategy Partner	Scottish Enterprise
Iain	Russell	Partner	Galbraith
Hannah	Schlesinger	Director of Development and Marketing	Edinburgh Science
Jeffry	Scott	NED Chair	Natwest
Nick	Stapley	Business Development Manager	Logan Energy
Emily	Stone	Climate & Sustainability Business Development Manager	Edinburgh Science
Alan	Thornburrow	Scotland Director	Business in the Community
Lucy	Tomlinson	Senior Programme Manager	US Embassy Small Grants Programme
Martin	Valenti	Director for Net Zero	South of Scotland Enterprise
Vanessa	Walsh	Head of Sustainability Energy, Security and Technology	Jacobs
Jimmy	Williamson	Executive Director -Sustainable Investment	SNIB

Appendix

(i) About Edinburgh Science

Edinburgh Science Foundation is an educational charity, founded in 1989, which operates Edinburgh Science's Education and Festival programmes. We are best known for organising Edinburgh's annual Science Festival – the world's first public celebration of science and technology and still one of Europe's largest – our science education outreach programmes, Generation Science and Careers Hive and our community engagement work.

Our mission is to inspire, encourage and challenge people of all ages and backgrounds to explore and understand the world around them. As leaders in our field of Science Communication, we work year-round to create and deliver dynamic hands-on workshops and exhibitions and inspirational shows, discussions, debates and performances that continually push the boundaries of public engagement with science. Communication and engagement are at the core of all our work and we strive to ensure that this is embedded in all aspects of our organisation.

Edinburgh Science also operates a large-scale commercial international programme of work under our Worldwide arm with any profit directed into our Foundation to enable charitable work. Edinburgh Science regularly presents events overseas and has been the Major Programming Partner of the annual Abu Dhabi Science Festival since 2011, helping to curate, produce and deliver the event. For international partners, the team at Edinburgh Science provide engaging content, curatorial advice on programming and business planning support, along with expert staff and training for local science communicators.

Edinburgh Science's UK and international projects reach a combined audience of over half a million people each year, in a normal year.

The Climate Opportunity Ideas Factory

Edinburgh Science coordinates and runs the Climate Opportunity Ideas Factory - a series of round table meetings for senior Scottish leaders to discuss ideas for action to enable Scottish enterprises to respond to the climate emergency. It was initiated in April 2019 when Edinburgh Science Festival awarded the Edinburgh Medal to Christiana Figueres, the Costa Rican Diplomat who was instrumental in bringing about the Paris Climate Agreement. We organised a round table on that day, with leaders of business, public sector, third sector and higher education present. They were challenged by Christiana to collaborate, to act, to not wait for anyone to give them permission, and to use the Climate Opportunity that presented itself for positive change.

Christiana was coming back to Edinburgh in two months and asked to meet again for an update on what this group had decided to do. Two months later, Baillie Gifford hosted a larger group of senior leaders who presented a number of ideas for discussion in this forum, with Christina Figueres and Roseanna Cunningham, the then Cabinet Secretary for Environment, Climate Change and Land Reform. Many of the ideas have been picked up by attending businesses and organisations to make an impact, and the attendees have told us that this group is of immense value to them, due to the diverse invite list and the facilitated discussions.

The purpose of the meetings is to generate new ideas that are then acted upon by those present to achieve steps towards reduced carbon emissions and greater environmental sustainability.

Edinburgh Science is in an exceptional position to bring together cross-sectoral leaders to gather views to identify new ways to work collaboratively to unlock ideas and create opportunities. The Climate Opportunity Ideas Factory provides a unique safe space for collaboration, resulting in major ideas, for example a national carbon reserve for offsetting which we know excited many organisations. With connections across industries and many sectors, and no agenda other than to share the science and to see a solution to the climate emergency, Edinburgh Science strongly believes that the time is right to harness the collective power of organisations and minds and to put Scotland at the forefront of this Climate Opportunity.

With thanks to our supporters who allow us to deliver this project:

PROGRAMME SUPPORTERS



Actual Investors

FUNDING PARTNERS

