

THE GREEN PAPERS

# SUSTAINABLE ENERGY

The logo for the Green Tech Festival Conference features a stylized green L-shaped graphic on the right side. To the left of this graphic, the text "GREEN TECH FESTIVAL CONFERENCE" is displayed in a bold, black, sans-serif font, stacked in three lines.

**GREEN  
TECH  
FESTIVAL**  
CONFERENCE



# GTF LONDON 2021

## ENERGY GREEN PAPERS



Imagine if we could unlock the power of collective knowledge to help solve the challenges of climate change. That's the idea behind the launch of the Green Business Bootcamps which took place during the GREENTECH FESTIVAL in London on the 5th of November 2021. The following Energy Green Papers aim to capture the key learnings, innovations and take-aways from the Energy Bootcamp hosted by Audi at Altitude on the 28th floor of the stunning Milbank building in central London.

The Green Business Bootcamps are a set of hands-on workshops for conference attendees focussed on key sustainability topics, and were launched for the beginning of our global event series. For the launch, each Bootcamp had a different topic focus (energy, finance, community) and took place at three inspiring locations across London. Once attendees arrived at the locations, they were greeted by a set of three topic-themed tables,

each hosted by experts from different companies. The following Energy Green Papers represent the key learnings from each of the following workshops/roundtable discussions:

### **TABLE 1: WHAT MAKES CHARGING A PROGRESSIVE PREMIUM EXPERIENCE?**

Host: Marc-Andreas Brinkmann, Head of Event Concepts/ Experiential Formats, Audi

### **TABLE 2: START YOUR ENERGY INDEPENDENCE JOURNEY TODAY**

Host: Veronika Markwardt, Digital Innovation Manager, Shell

### **TABLE 3: FINDING THE TECHNOLOGIES AND BUSINESS MODELS TO REACH NET-ZERO ENERGY SYSTEMS BY 2050**

Hosts: Sarrah Raza, Analyst, BloombergNEF and Lauren Kiel, General Manager, Bloomberg Green.

THE GREEN PAPERS

#1 ENERGY



# WHAT MAKES CHARGING A PROGRESSIVE PREMIUM EXPERIENCE?

Host: Marc-Andreas Brinkmann,  
Head of Event Concepts/Experiential Formats Audi

GTF LONDON PARTNERS



Julius Bär



# THE GREEN PAPERS

## #1 ENERGY



The first workshop table was being hosted by Marc-Andreas Brinkmann with support from his topic-area expert colleagues Thomas Schneider, Alexander Claus and Thiemo Färber, connected remotely from the Audi HQ in Germany. With a strong focus on transformation to electric vehicles, Audi's vision of CO2 neutral mobility led to the focus of the bootcamp: how could the car charging process be transformed from an inconvenience to a value-added, premium experience?

### **INNOVATIVE SOLUTIONS AND KEY TAKE-AWAYS:**

The discussions focussed around the need for charging to be convenient and a premium experience. There were some quite novel proposals that came up around smart apps, predictive grid balancing, and even the possibility of rent-

ing your virtual battery storage to neighbours/community during low car-use phases.

### **KEY INNOVATIONS THAT HAVE BEEN DISCUSSED:**

- ▶ Pre bookable charging stations managed by an app
- ▶ Predictive charging planning with user feedback
- ▶ Price incentives to promote grid stability (off-peak charging)
- ▶ Transparent feedback regarding the sources and carbon footprint of different charging options (with the ability to purchase offsets from trusted partners)
- ▶ Bonus programs aligned with local small businesses (reimagine charging as a chance to engage with the community)

# THE GREEN PAPERS

## #1 ENERGY



- ▶ Integration of car into home-power system
- ▶ Renting your car as a virtual battery node on the public energy market (when plugged in at home/ during low use periods)

### **MARC-ANDREAS ENCAPSULATED THE EXPERIENCE FOR AUDI WHEN HE SAID:**



It really was a great opportunity for us to engage with a wide-range of energy industry players all who had different levels of experience with electric vehicles. Some of the insights and feedback that came back really have been formative and will certainly...

...influence our thinking about how to create a first-class experience for our customers. The key to success of electric mobility and the challenge of this transformation is the availability of charging infrastructure. Audi is working on a concept for quick-charging for premium-level electromobility. The Audi charging hub with quick-charging stations addresses future peak demands and the lack of charging opportunities at home. A first pilot has just recently been opened near the city of Nuremberg.

# THE GREEN PAPERS

## #1 ENERGY



AUDI'S NEW CHARGING HUB CONCEPT (SUPPLIED AUDI)

THE GREEN PAPERS

#2 ENERGY



# START YOUR ENERGY INDEPENDENCE JOURNEY TODAY!

Host: Veronika Markwardt,  
Digital Innovation Manager, Shell

GTF LONDON PARTNERS



Julius Bär



# THE GREEN PAPERS

## #2 ENERGY



The second bootcamp table was hosted by Veronika Markwardt and was aimed at unpacking how consumers can make a transition from centralised, complex, transport/carbon-intensive energy sources to infrastructures that are local, flexible, modular and smart. The first set of workshops were focused on the UK market and divided discussions around current barriers (and some unrealised opportunities). The later workshops shifted towards mapping out paths forward and next steps.

### **CURRENT STATUS & BARRIERS IN THE UK MARKET**

- ▶ Declining manufacturing sector - outsourcing to other markets (China/India/US)
- ▶ Lack of tech-transfer from research into business (Silicon Valley style innovation)

- ▶ Grid challenges and "solar chaos"; haphazard developments/short-termism
- ▶ Greenwashing distracting/blurring true efforts to address climate change
- ▶ Disconnect and distrust between government, business and general public
- ▶ Lack of transparency regarding emissions (standards, scope 1/2/3, reporting)

### **UNIQUE OPPORTUNITIES IN THE UK MARKET**

- ▶ Geographically advantaged position, gas from the North Sea (blue and later green hydrogen); alongside wind, tidal and potentially geothermal possibilities
- ▶ Brexit could be an opportunity for the UK to move ahead (outperform a slower EU)

# THE GREEN PAPERS

## #2 ENERGY



### HOW TO MOVE FORWARD/ACTIONS REQUIRED

- ▶ The role of media, influencers and role models in storytelling/changing perceptions and education, information and transparency generally
- ▶ Acknowledging/addressing fears, using incentives to create ownership and buy-in
- ▶ Leveraging intergenerational motivators ("Fridays for Future" influence on incumbents/parents/grandparents, challenging, pressuring and influencing decisions)
- ▶ Scale and fund relevant and promising "lighthouse" projects to guide the path
- ▶ The role of the government: "carrot and stick", (tax) incentives, reporting standards, penalties and a clear message to the market regarding future pricing/regulations
- ▶ Sector-specific approach catering for industry differences e.g. auto, shipping, aviation
- ▶ Invest in and incentivize sharing, apps, mobility, public transport
- ▶ Create future-driven knowledge economies: invest in education, upskilling, early financial and entrepreneurial education at school
- ▶ Connecting early-stage tech companies to incumbents removing the perceived competition between "unicorns" and established brands
- ▶ Importance of brand authenticity, brand partnerships and building "emotional capital"
- ▶ Communication on an emotional level ("not just facts", rational arguments, human decision making, addressing fears, building case and increasing impetus for change)

# THE GREEN PAPERS

## #2 ENERGY

Overall, it was acknowledged that the UK market offers a unique opportunity to become a global leader in transitions to zero-carbon economies. Great advantages include an already commendable bipartisan commitment to proactively addressing climate change supported by a business community that is engaged in leveraging benefits of new, cleaner, greener technologies and business models.



VERONIKA MARKWARDT, DIGITAL INNOVATION MANAGER FROM SHELL  
LEADING A BOOTCAMP DISCUSSION

THE GREEN PAPERS

#3 ENERGY



# FINDING THE TECHNOLOGIES AND BUSINESS MODELS TO REACH NET-ZERO ENERGY SYSTEMS BY 2050

Host: Sarrah Raza, Analyst, BloombergNEF and  
Lauren Kiel, General Manager, Bloomberg Green

GTF LONDON PARTNERS



Julius Bär



# THE GREEN PAPERS

## #3 ENERGY



The third bootcamp table was hosted by Sarrah Raza from BloombergNEF and unpacked the challenges that need to be overcome to become carbon-neutral by 2050. While tech topics such as hydrogen and data centre sustainability were touched upon, overwhelmingly the discussions focused on overcoming social and communication barriers which were seen as key to reaching lasting and broadscale climate goals.

### **HOW CAN WE DRIVE UPTAKE IN 'UNSEXY' BUT HIGH-IMPACT CLIMATE SOLUTIONS?**

Linked to the climate change communication challenge, a key theme that was visited during the discussion rounds was the need for targeted PR and Public Awareness campaigns to help promote highly effective low-cost climate solutions. Significant funding and venture

capital is currently diverted towards technologies that are good at creating hype but are yet to show significant positive climate impacts. This is in the context of long-standing evidence that the following simple approaches like: **1)** Improving refrigeration efficiency; **2)** Better building insulation; **3)** Replacing outdated heating systems; **4)** Improving home and office energy efficiency generally, have a significant impact on carbon emissions.

Participants noted that a concerted effort was required with government supported education campaigns, incentives and tax breaks alongside efforts from private enterprise to support start-ups and innovation in these less-hyped areas. Moderator Sarrah Raza remarked: "To progress to net zero, two main things are needed

# THE GREEN PAPERS

## #3 ENERGY



– innovation and capital. We are already seeing a plethora of new technologies furthered through early-stage accelerators through to exits made possible through SPAC transactions, but that then moves us onto scaling and adoption. These discussions have highlighted the problem of communication: the need to boost public awareness and lower the cost of these changes, so that they become standard across our communities."

### **MORE THAN A LIFESTYLE CHOICE: MAKING SUSTAINABILITY ACCESSIBLE TO ALL**

If efforts to address climate change are to be successful, then a 'no one left behind' policy must be adopted. Unfortunately, many sustainable living and purchasing options remain in the domain of luxury life-style choices rather than options accessible to all. During the

sessions, questions were raised about how to bridge this gap: if off-sets and taxes should help balance the sustainability divide between rich and poor and if we should even be expecting those in lower socioeconomic circumstances to reach net-zero on the same timescales as those with greater means.

Perceived reticence by some sectors of the population to adopt sustainable behaviours was seen clearly as a responsibility of the government in needing to set a proactive agenda rather than following the tastes of any particular interest groups within the community. Complicated questions about responsibility also dominated the final sessions where the question was posed: "Who's responsible anyway?". This was discussed in detail regarding the airline industry and a combined

# THE GREEN PAPERS

## #3 ENERGY

approach including governmental taxes, cost borne by users, airline-driven investments and new tech were seen as key components of future sustainable air travel.



**SARRAH RAZA**, ANALYST FROM BLOOMBERG NEF  
ANNOUNCES HER KEY TOPICS AT GTF LONDON

THE GREEN PAPERS

# STAY INFORMED GET INVOLVED.



If you enjoyed reading the Energy Green Papers, stay tuned to our [LinkedIn Channel](#) where the Sustainable Community and Sustainable Finance Green Papers will be released shortly. All Green Papers will be available to download [here](#). For more information about the Sustainable Business Bootcamps and to get involved in our global festival series, please follow us on: [LinkedIn](#), [Facebook](#), [Twitter](#) and [Instagram](#).

GTF LONDON PARTNERS



Julius Bär

