



## Global Survey on RD&D: Proposal

Technology Executive Committee

March 21, 2023

**FCA** Future  
Cleantech  
Architects



## Who we are

- Future Cleantech Architects is a **non-profit climate innovation think tank** based in Germany
- We focus on **high-impact R&D**, targeting technologies that carry potential to drive down greenhouse gas emissions massively
- We work with a core team of analysts and two organizational bodies: our Expert Panel and our Advisory Board, both equipped with cleantech specialists



## Cleantech survey

### 1 → Welcome to the 2023 Cleantech RD&D survey.

We know that surveys can sometimes be tedious.

However, your insights will help us identify key areas for cleantech RD&D.

Prior to answering the questions, would you like to receive more information about the purpose and scope of this survey? \*

Yes

No

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## We propose to conduct a joint survey on cleantech RD&D

- The objective of the survey is to achieve a comprehensive **overview of future global RD&D needs**
- The survey will address the **key roadblocks and barriers** cleantech encounters in each country
- The survey will go out to **cleantech stakeholders** globally

## The RD&D survey fits activity 2.1 and 2.2 from the 2023-2027 Rolling Workplan

Activity ID	Activity	Expected outputs/deliverables					Potential partners (not exhaustive)
		2023	2024	2025	2026	2027	
A.2. Stimulate climate technology RD&D through partnerships, strengthening the roles of innovators and incubators and accelerators, and the participation of developing country Parties in collaborative approaches to RD&D.							
Climate objectives: Cross-cutting							
A.2.1	<b>RD&amp;D:</b> Building on the TEC's work on collaborative RD&D, analyse the needs for RD&D for high-impact emission-reduction technologies to help countries implement their NDCs and other mitigation strategies, and ensure long-term environmentally sustainable energy supply. Identify ways to increase participation of developing country Parties in collaborative approaches to RD&D.	i. Engagement and consultation with potential partners to define the scope of work, inter alia, during TEC meetings, workshops, events, etc.(8b, 8e, 8g, 20d)		ii. Knowledge product (8b, 16a)		Breakthrough Energy CTCN PALO FCA GCF Global Innovation Hub Mission Innovation Academia and universities International technology RD&D partnerships and initiatives	
A.2.2	<b>Incubators and Accelerators:</b> Building on the TEC's previous work on incubators and accelerators, work with Parties to promote their use and support the development of funding proposals for submission to the entities of the Financial Mechanism that incorporate incubators and accelerators and seek to build effective ecosystems for start-ups (e.g. looking at sources of funding, IPR systems and practices, industry-academia partnerships, public-private partnerships and SME engagement).	i. Engagement and consultation with potential partners to define the scope of work, inter alia, during TEC meetings, workshops, events, etc. (8h, 20a, 25a, 25c)		ii. Knowledge product (8h, 16a)		CTCN PALO FCA GCF GEF Global Innovation Hub International technology RD&D partnerships and initiatives. Academia and universities Mission Innovation Breakthrough Energy	

- A.2.1 refers to the analysis of RD&D needs for high-impact emission-reduction technologies
- A.2.2 includes building effective ecosystems for innovators

## Building upon collaboration from 2021

- We were pleased to moderate the launch of the TEC compilation on good practices and lessons learned in International Collaborative RD&D
- As the 2021 TEC compilation was released, we shared results from our own Cleantech R&D survey
- We were able to compare results and conclude key takeaways



# WORLD ECONOMIC FORUM

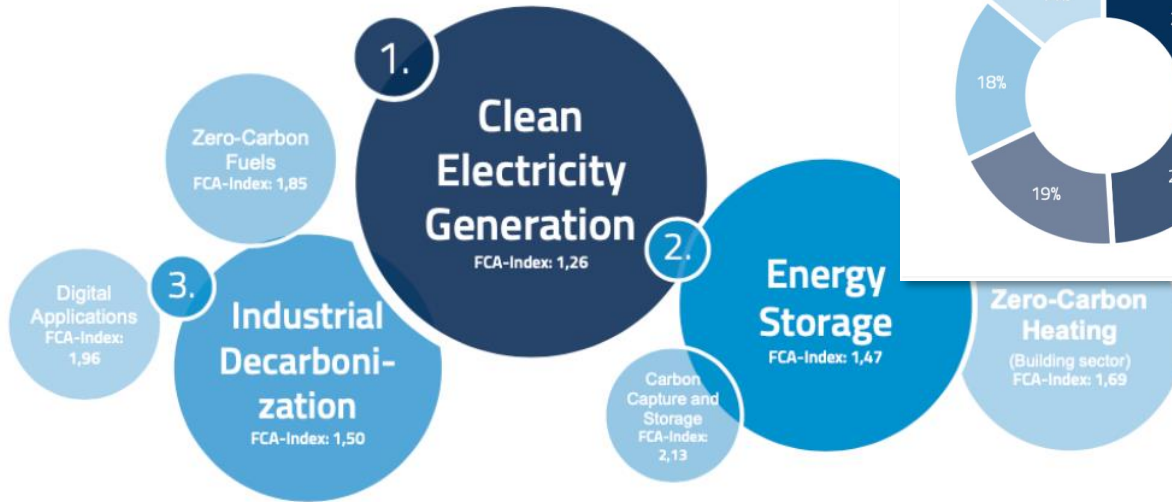
The FCA 2021 survey on key priorities in R&D was released through the WEF

- Building upon two previous publications through the WEF Agenda blog, we released our previous survey's results in early 2021
- Unlocking Cleantech Innovation  
August, 2019
- Boosting Cleantech R&D after Pandemic  
April 2020
- Survey Analysis Top Cleantech R&D  
March 2021

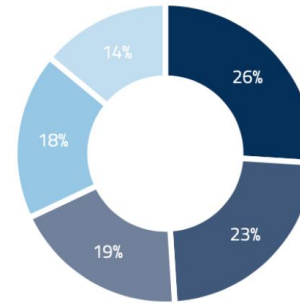


# The 2021 Survey ranked technologies according to participants' priorities

## 2 | R&D Priorities: 2021 - 2025



## 1 | Participants



- Energy Industry / Utilities
- Public sector
- Finance / Investors
- R&D / Laboratory
- Other

# We clustered – and communicated – key findings amongst stakeholders

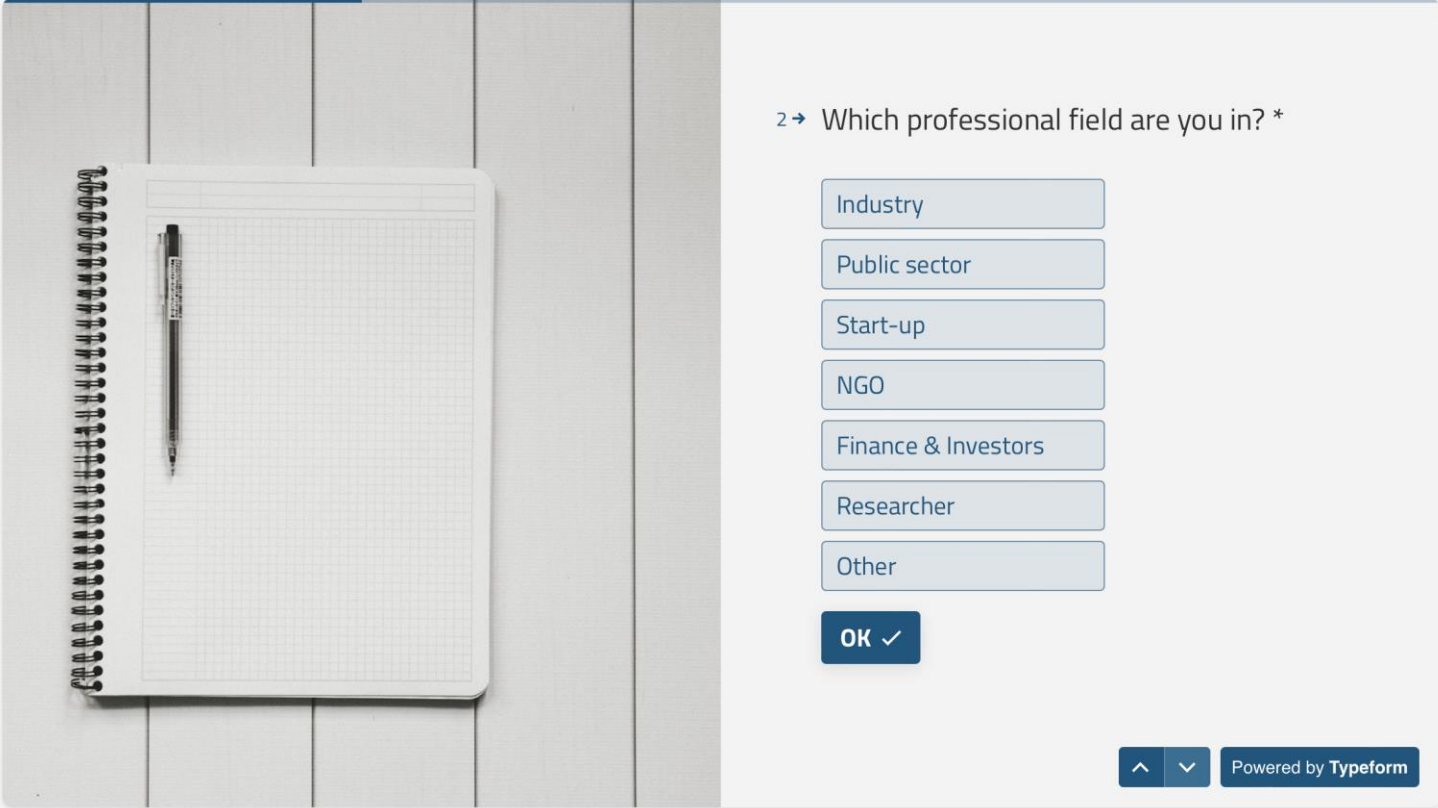
## Drivers 2030 and beyond

Which forces will drive the energy transition? Participants mentioned a wide array of segments that will need to be incorporated into cleantech R&D planning – and will most likely play a significant role in the time beyond 2030. We have clustered them into four fields.





## An intuitive and user-friendly interface: examples



2 → Which professional field are you in? \*

- Industry
- Public sector
- Start-up
- NGO
- Finance & Investors
- Researcher
- Other

**OK ✓**

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# An intuitive and user-friendly interface: examples

3 → What region of the world are you located in? \*

Type or select an option ▾

OK ✓



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## An intuitive and user-friendly interface: examples

12 → If you have the funding and the technology is available: What can stop you from scaling **in your region** specifically? \*

You can choose up to 2

Political support

Demand

Legislations

Bureaucracy

Other

OK ✓



We intend to launch the survey in April and want to publish results in August

First draft of survey and survey design



Publication of survey and joint dissemination campaign



Finalization of results and consultation on final report



Presentation of final report at COP28



Apr 23

Jun 23

Sep 23

Mar 23

Apr-Jul 23

Aug 23

Dec 23



Finalization of survey



Presentation of survey and intermediate results at The ARC23 Festival in Remscheid



Presentation of results at TEC27 meeting

## Overview survey questions

#	Question
1	Which professional field are you in?
2	What region/country of the world are you located in?
3	Does your country have a coastline?
4	What is the overall environment for cleantech RD&D globally right now?
5	Compared to this, how is the overall environment for cleantech RD&D in your region?
6	Let us first take a look until 2030. Where do we need to accelerate RD&D most urgently globally?
7	Again, looking to 2030: Where do we need to accelerate RD&D most urgently in your region?
8	Let us now look towards 2035. Where do you see the biggest RD&D needs from 2030 to 2035 globally?
9	Once more looking towards 2035: Where do you see the biggest RD&D needs from 2030 to 2035 in your region?
10	What are the key elements for successful cleantech RD&D?

#	Question
11	Let us look at cleantech innovation stages: At which step do we lose a lot of the most promising developments?
12	What do you consider the 3 biggest roadblocks in advancing the development of critical breakthrough cleantech globally?
13	What do you consider the 3 biggest roadblocks in advancing the development of critical breakthrough cleantech in your region specifically?
14	If you have the funding and the technology is available: What stops you from scaling up in your region specifically?
15	What role should the public sector play?
16	If you could wish for three measures to speed up the development of breakthrough cleantech in your region, which would they be?
#	Optional Expert Section
17	Do you consider yourself an expert in one of the following cleantech fields?
18	What do you consider to be the 3 biggest roadblocks in advancing the development of critical breakthrough cleantech globally in your field of expertise?
19	In your sector, which key stakeholder could speed things up the most and how?



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