

#Hack4Climate Innovation Program

Summary Profile, 11/2018

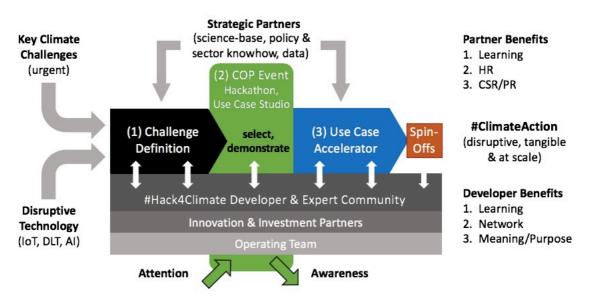
#Hack4Climate (H4C) is a 5-year innovation program (2019-2022) designed to accelerate disruptive and tangible climate solutions at scale. Given the significance of the climate-task ahead and the limited time left, the H4C logic is simple: Only with far reaching, 'disruptive' innovation will Paris climate targets be achieved.

H4C was initiated by the Zurich-based Cleantech21 Foundation (C21, 10y track record) in early 2018 following two years of research and capacity building activities. It is based on the success of a series of preparatory <u>workshops</u> (held in 17 technology centres on 6 continents in mid 2017) and the <u>first ever hackathon</u> taking place at a COP climate conference (COP23 in Bonn 11/2017, note the '<u>after-movie</u>').

H4C's mission is to maximise its climate action impact through regulatory and technological innovation. The focus of H4C is at the intersection of climate and three key <u>disruptive</u> <u>technologies</u>: Internet of Things (**IoT**), Distributed Ledgers (**DLT**, **'Blockchain'**), and Artificial Intelligence (**AI**). H4C is provider-/technology-neutral.

The H4C program consists of three main tracks: **(1) Challenge Definition** (clearly specifying on what to innovate), **(2) COP Event** (a yearly anchor event held during COP climate conferences), and **(3) Use Case Accelerator** (selecting and supporting the best teams/challenges to become tangible use cases as part of an 18-months program).

In combination, the three tracks represent a highly effective, **open innovation** approach, optimising participant-reach and development-depth, as well as involving different innovation and investment partners.



At the core of the program is the **H4C community**. With its climate focus, H4C can mobilise leading developer-talent globally for projects with purpose. Its official <u>UNFCCC</u> and <u>Connect4Climate</u>/World Bank partnerships represent important differentiators. With the high-profile COP event, it attracts attention and raises awareness in the climate and technology communities as well as engages leading public and private sector partners (for regulatory and technology updates, pilots, co-investments, etc).

H4C is designed to **identify and scale disruptive solutions** for climate, addressing 100 challenges (20 yearly) and 50 use cases (10 yearly) as part of its 5-year program. H4C's engagement focus is set in cooperation with its content partners <u>Climate-KIC</u>, <u>WWF</u>, <u>FutureEarth</u>, the <u>Stockholm Resilience Centre</u>, and <u>Mission2020</u>. Based on partners' existing analysis on key

climate challenges, H4C defines <u>engagement priority areas</u>. A lean operational team maintains on- and off-line cooperation infrastructure and links the industry and policy knowhow of partners with the H4C community.

In this dynamic process with **rapid feedback loops**, community members can provide input and share their global project experience for a particular challenge posted to the community. Challenges are thereby refined and then selected. This is done based on an <u>analysis matrix</u> consisting of (1) scalability (climate/emission impact, operational model), (2) role/gap analysis (other players, inter-provider role), (3) regulatory feasibility, and (4) technical feasibility. H4C anticipates approx. 50% of challenges to be community-developed (with active partner engagement), and 50% of challenges and use cases to be sourced from external submissions.

Selected from the 2017 hackathon at COP23, H4C currently supports 5 use cases (such as <u>REDD-Chain</u>) and prepares new challenges for its next event at <u>COP24</u>, taking place in Katowice/Poland, 09-13/12/2018. Already with its 2017 activities, H4C has **demonstrated impact** – attracting some of the world's leading companies (e.g. Microsoft), foundations (e.g. CIFF), and universities (e.g. ETH) as <u>supporters</u>, raising co-finance for use cases (e.g. from IADB), and spurring new initiatives (e.g. <u>Blockchain & AI at ETH Zurich</u>).

The total H4C 5-year development budget is EUR75m, incl. co-funding sourced from partners. Activities to date have been financed by C21, first impact investors/advisors, <u>Climate-KIC</u> and the <u>ClimateWorks</u> foundation. In order to support ongoing project development, source expertise and funding, H4C offers two affiliate programs – one directed to **innovation partners** (firms, NGOs, foundations), the other to **impact partners** (impact investors, incl. individuals, funds, family offices).

Partners benefit from their H4C participation through (1) learning from interaction with the ideation/prototyping process, (2) access to human resources (intrinsically motivated, top global talent pool), (3) quality PR exposure (during COP events as well as partner events, press, and continually in the community), and (4) tangible CSR/impact (interesting and relevant climate action). H4C partners can actively contribute to the definition of challenges, participate in COP events (including facetime with developers), and are offered first cooperation and participation rights as part of the H4C accelerator.



For the remaining funding, H4C will issue an **impact investment token** through a dedicated H4C foundation. As part of this, Cleantech21 as the initiator will transfer all H4C rights to the new foundation. The token issued by that foundation represents the program's ownership rights in accelerator spinoffs. It will offer the H4C impact opportunity to a large number of investors (democratising participation). The token shall also serve to incentivise developer participation and form the basis for a self-governing ecosystem to emerge once H4C's 5-year operating period will have come to end.

With its unique track and formal partnerships, H4C has the potential to develop into one of the most relevant innovation acceleration initiatives in the climate space. The combination of its leading-edge community of developers, policy access, and the industry knowhow of its partners/affiliates, bears strong potential for tangible and scalable climate action. Addressing the world's key challenge with disruptive technologies and as part of a modern, open-innovation format based on co-creation, represents both a meaningful climate engagement as well as a sound impact investment case.

