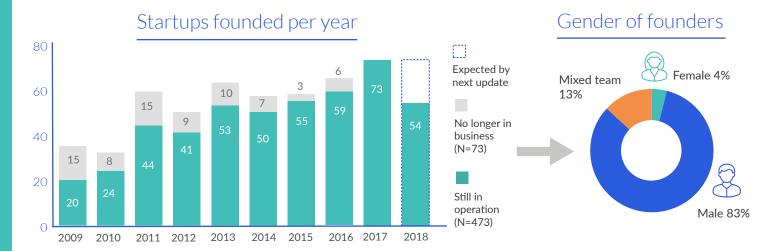
SWISS INNOVATION ENVIRONMENT MOVITOR

2019 YEARLY MONITOR

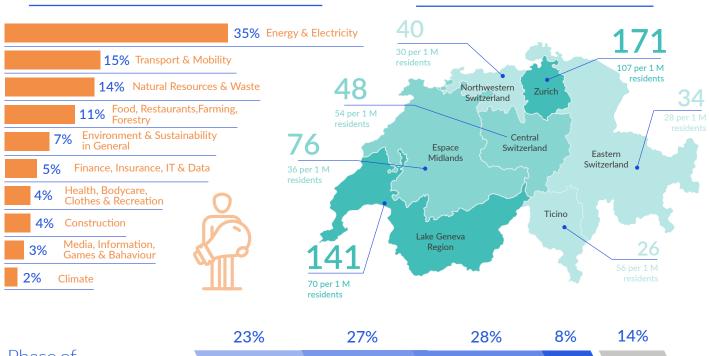
Startups in energy and environment sectors founded between 2009-2018

Exploring the 473 active startups of the energy and environment landscape in Switzerland



Area of activity of the 473 startups

Startups founded per region



Phase of development

The share of startups per development phase

Market readiness of product



Number of founded startups increasing

Since 2009, between 20 - 73 companies have been founded each year in the energy and environment sectors, with peaks in 2013, 2016 and 2017. The overall upward trend of founded startups is a positive sign signalling potentially both an improvement in startup conditions in Switzerland for these sectors, as well as an improved visibility overall of these companies. For 2018, the lower count is due to low visibility of newly founded companies on the market.

Healthy pipeline of

ambitious startups

The startups in the Innovation Monitor equally cover all three development phases: initial development, market entry and growth. Such a strong pipeline of upcoming startups is a positive sign of a vibrant ecosystem. Few startups (8%) have recently reached an established phase, however this may not be a stable phase, thus it is worth continuing to monitor their activities. To consider success rates, we track if a startup does not succeed, and currently 14% of the tracked startups have failed.

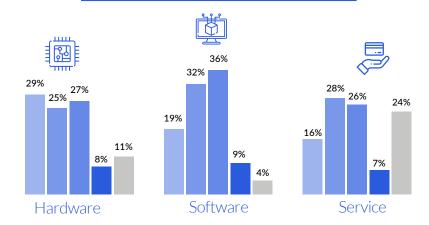
ETHZ and EPFL are drivers of innovation

The Lake of Geneva and Canton of Zürich regions, with the EPFL and ETHZ respectively, prove to be strong drivers of innovation, as the majority of startups are founded here not only in absolute number, but also relative to the regional population. However in the last year Zürich shows the strongest growth with the highest founding rate overall. While the number of founded companies differs between regions, also small regions like Tessin and Central Switzerland are effective in fostering entrepreneurship.

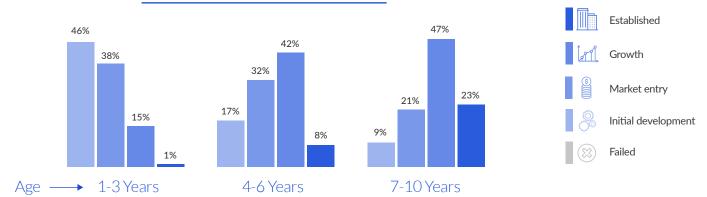
Founders are overwhelmingly male

For the first time we have collected data on the gender of the startup founders. Not surprisingly, an overwhelming majority (83%) of founders are male in these business areas. However, astonishingly there are very few women involved, only 13% of startups are founded by mixed teams and as few as 4% are founded by one or more women. More work is needed to support more gender diverse teams to engage in these promising areas.

Development phase based on product type



Development phase depending on age



Hardware vs. software predicts development phase

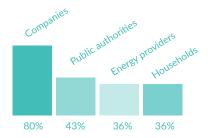
How does the product influence the speed of development? In the development phase, hardware startups with a tangible product are the majority (29%). In comparison, software and service business models move quickly to prototyping and proof of concept, and thus are more often in the market entry phase. Software products seem to be most promising as only 4% of startups have failed-compared to hardware 11% and a surprisingly high 24% of the Service companies.

Initial development can last from 1 to 7 years, depending on the product

Not surprisingly, startups develop at very different speeds: after 1-3 years some companies (15%) are already in a growth phase, while even after 7 years 9% are still in development. When comparing development "depending on age" relative to the "product type", we found that mainly hardware-focused startups are still in the initial development phase after 7 years, while only very few of service-focused startups and no software companies remain at this phase.

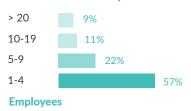
Results from the 2019 survey with 110 participating startups.

Main target customer segment



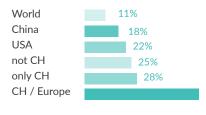
80% of startups target companies with 1/3 targeting energy providers in particular. Also public authorities are an important client. Only 36% target private households.

Size of startups



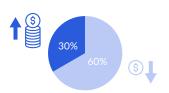
Most of the startups are very small. 57% have less than 5 employees, and 22% have less than 10. Only 9% have more than 20 employees.

Target markets



Almost 1/3 of the startups focus on the Swiss market and 2/3 on Swiss and European markets. Only 11% target the world market.

Profitability



About 60% of startups do not make a profit. The average turnover of companies with no profit is 300k CHF, while the already profitable firms have a turnover of 800k CHF.

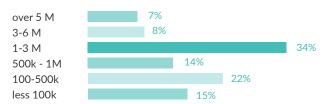
How much capital was raised and where did it come from?



52% of startups raised capital in the last three years.

77% of the investments came from Switzerland, with volumes above 2 M CHF mainly from other countries. About 30% of startups raised between 1-3 M CHF, 30% below and 40% above this amount.

How much capital do you need to reach the next development step



Why did your perceived growth not fulfil expectations?



Considering your current stage of company growth, what support would help you within the next three years?

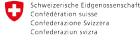


Background

The Swiss Environment & Energy Innovation Monitor provides information on innovative Swiss startups in the environment and energy business sectors for decision makers, investors and public authorities. At the end of each year, a yearly monitor is produced to show key information about startups founded in the last ten years. The monitor database was started in 2014 covering mainly energy startups and was expanded in 2018 to

include all environment-related startups. Data collection is done yearly through extensive internet research and an online survey, and is supplemented by data directly received from startups on our website. Please participate with your data, if you are a startup or innovative SME and stay up-to-date on startup opportunities in Switzerland through our newsletter (sent 5x per year).





Swiss Federal Office of Energy SFOE





