



Western
Switzerland
Cleantech
Cluster

Panorama of cleantech financing in Switzerland

NRP73 – Sustainable Economy
Financing investments in clean technologies

Eric Plan - October 16th 2018 - Geneva

www.cleantech-alps.com

Scope

- > Definitions
- > Stakeholders of the Swiss scene
- > A particularity of cleantech: the so called “DVD”
- > Facts and Figures
- > Status and trends of cleantech in Switzerland

Cleantech are ...

> All kind of products,
services and technologies

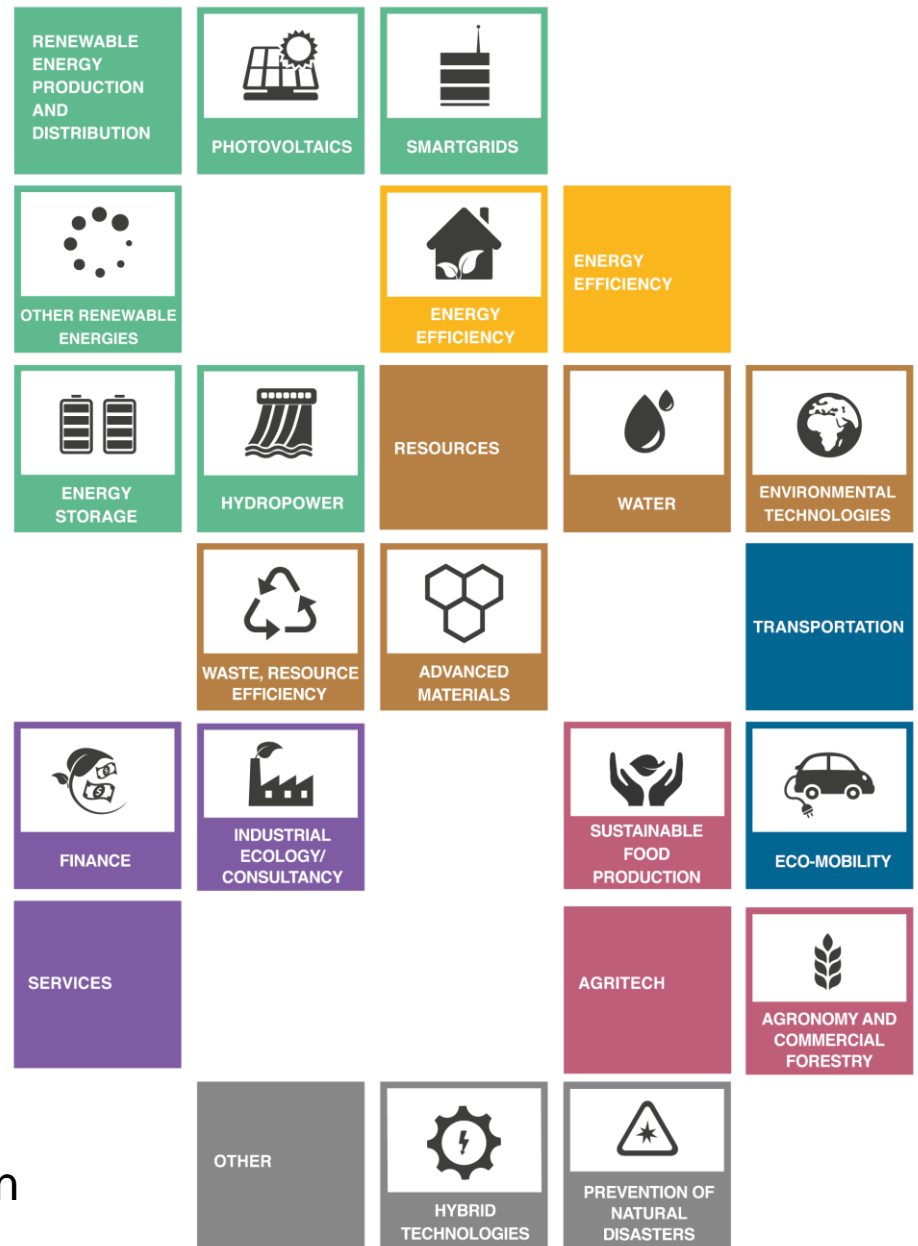
...

... allowing sustainable
use of resources ...

... so as the development
of renewable energies



Categories and sub-categories of the cleantech sector



Particularity :
No international recognized categorization

An overview of Swiss cleantech start-ups in figures



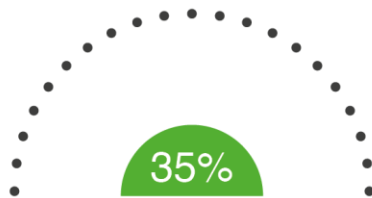
207

clean technology start-ups
created over the last 10 years
and still active



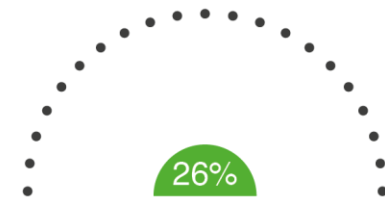
10%

of Swiss start-ups
are in the cleantech
sector



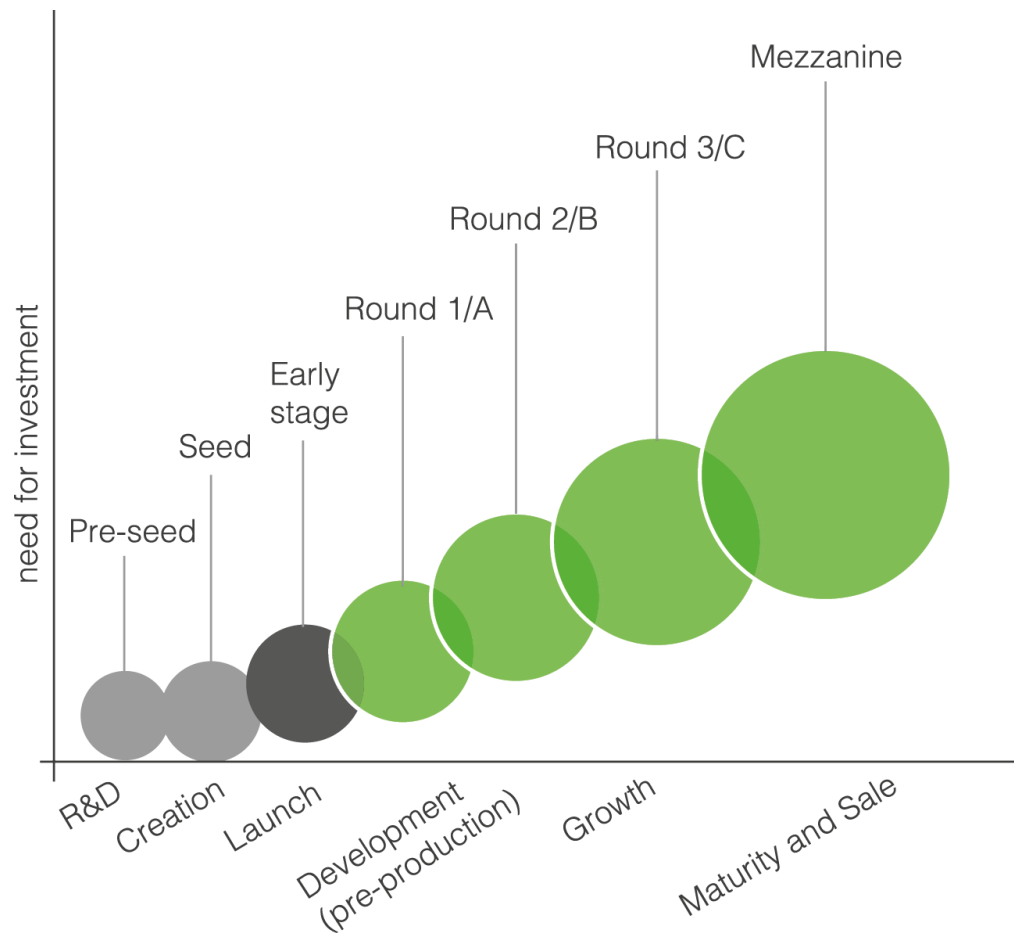
of start-ups consider funding
to be their main challenge

57 key players recorded
in the area of funding



of cleantech start-ups are spin-offs
of the Swiss Federal Institutes
of Technology in Lausanne
(EPFL) and Zurich (ETHZ)

Life cycle of cleantech start-up and financing steps



Swiss financing stakeholders' community (Who invest when ?)

FINANCIAL ACTORS	FUNDING STEPS					
	Pre-seed	Seed	Early stage	Round A	Round B	Round C
Accelerator (acceleration programme)		●				
Bank					●	●
Business Angel		(●)	●	(●)		
Venture Capitalist - VC			(●)	●	●	●
Cooperative			●	(●)		
Corporate Venture			(●)	●	●	●
Family Office				(●)	●	
FF&F (Fools, Family & Friends)		●				
Founder	●	●				
Foundation		●	●			
Impact Investor				●	●	●
Incubator		●	●			
European Public Institutions (H2020, ...)	●					
National Public Institutions (CTI, SFOE, FOEN, ...)	●	●	●			
Cantonal Public Institutions		●				
Industrial Partner (R&D)		(●)	●	●	●	
Crowdfunding Platform		(●)	●			

● Core target (●) Possible Intervention

Which financial actors are involved in which stages ?

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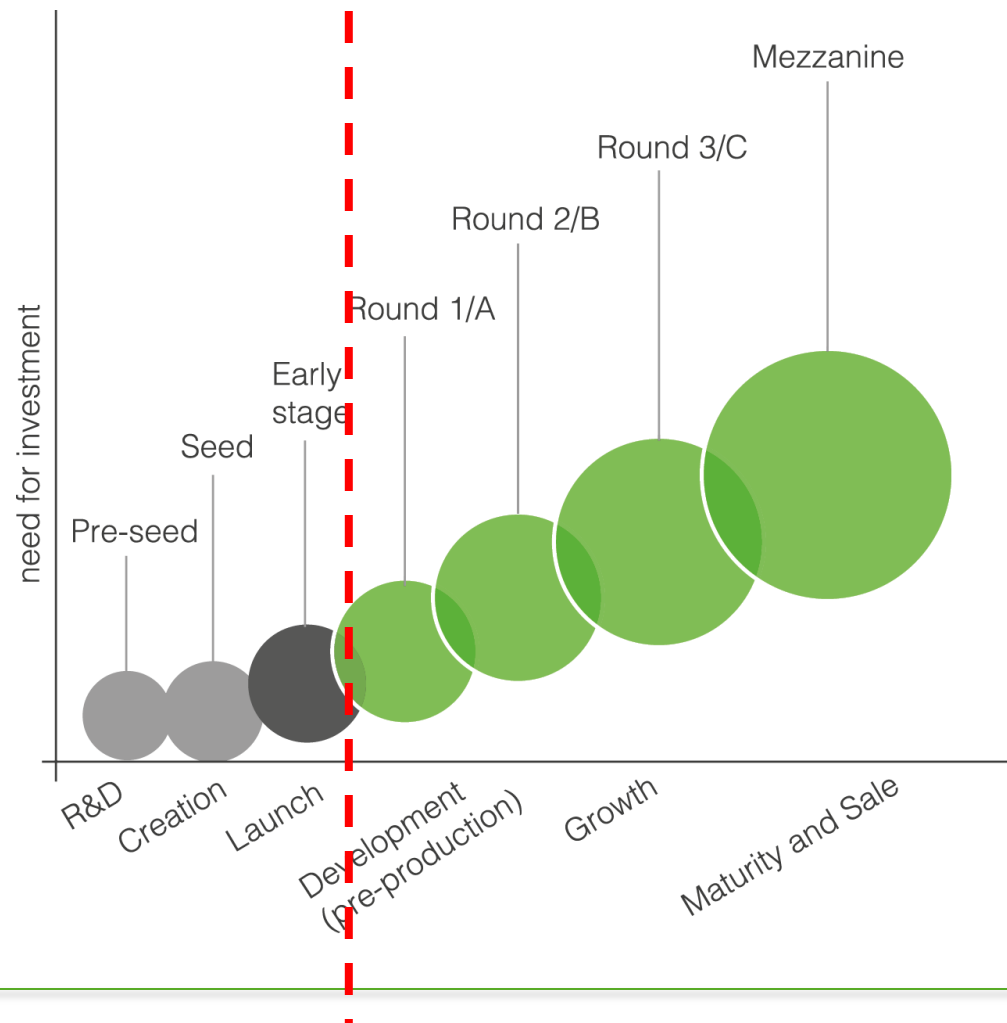
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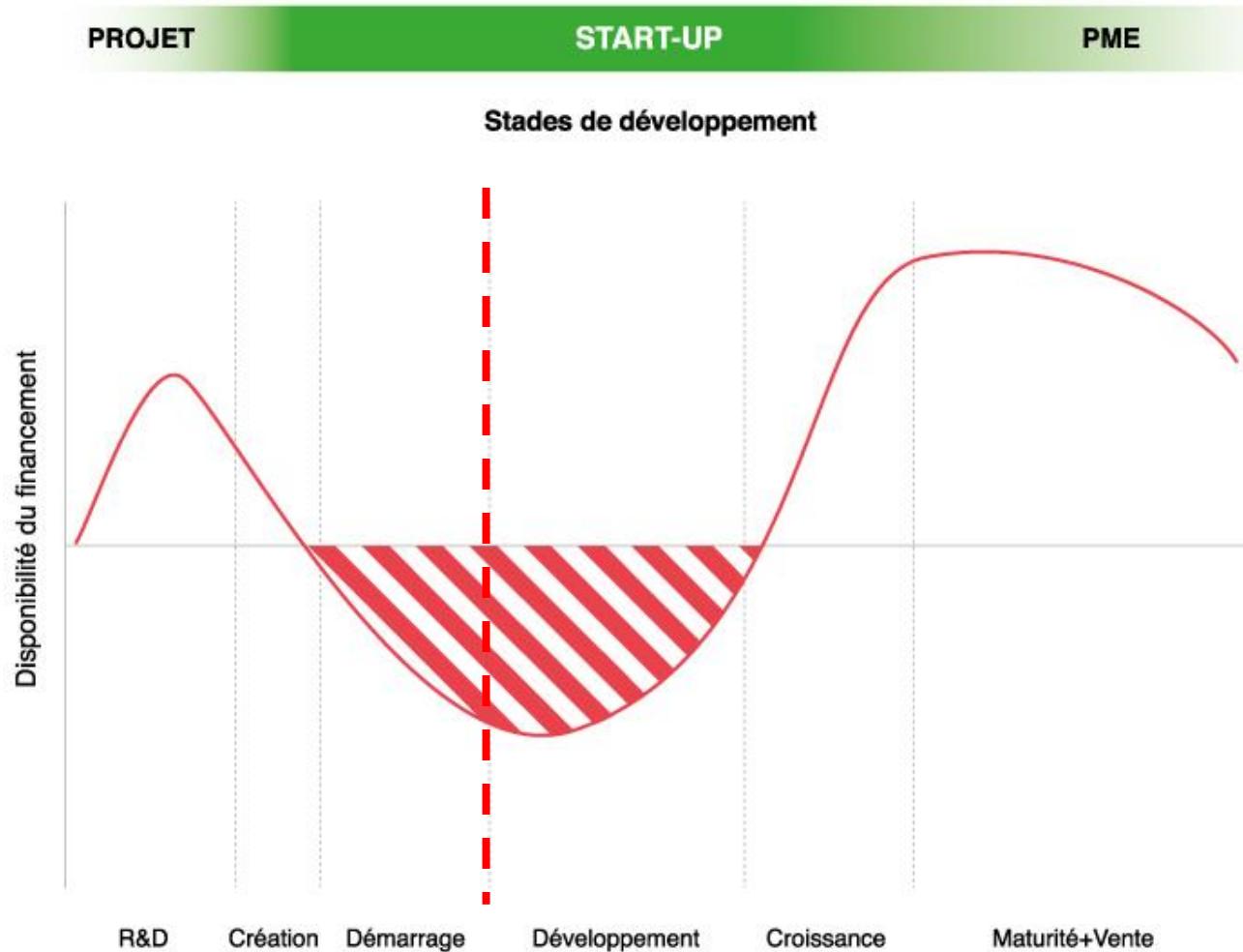
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Crowdfunding Platform		(●)	●			

● Core target (●) Possible Intervention

Life cycle of cleantech start-up and financing steps



Financing needs of a cleantech start-up over its life cycle



“Death valley”

- > The realization of an industrial pilot (demonstrator) deployed in the field can cost from 5 to 10 million francs,
- > The transition to a production line can easily cost ten times as much,
- > And this before a significant turnover is generated,
- > This plays a key role on the road to commercialization
- > .

“Death valley”

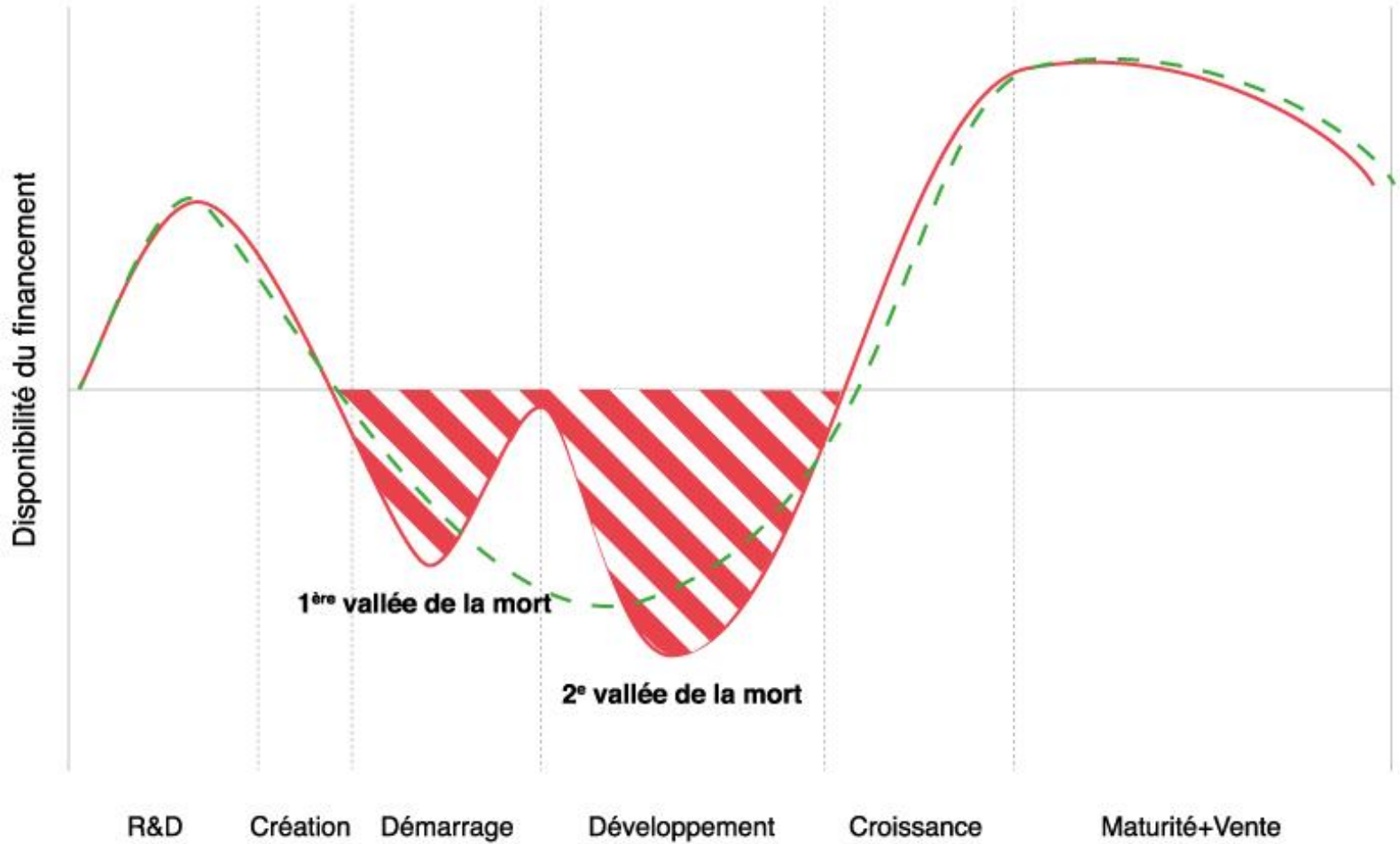
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- > The transition to a production line can easily cost ten times as much,
- > And this before a significant turnover is generated
- > This plays a key role on the road to commercialization
- > Sometimes even **two successive valleys of death !!!**

PROJET

START-UP

PME

Stades de développement

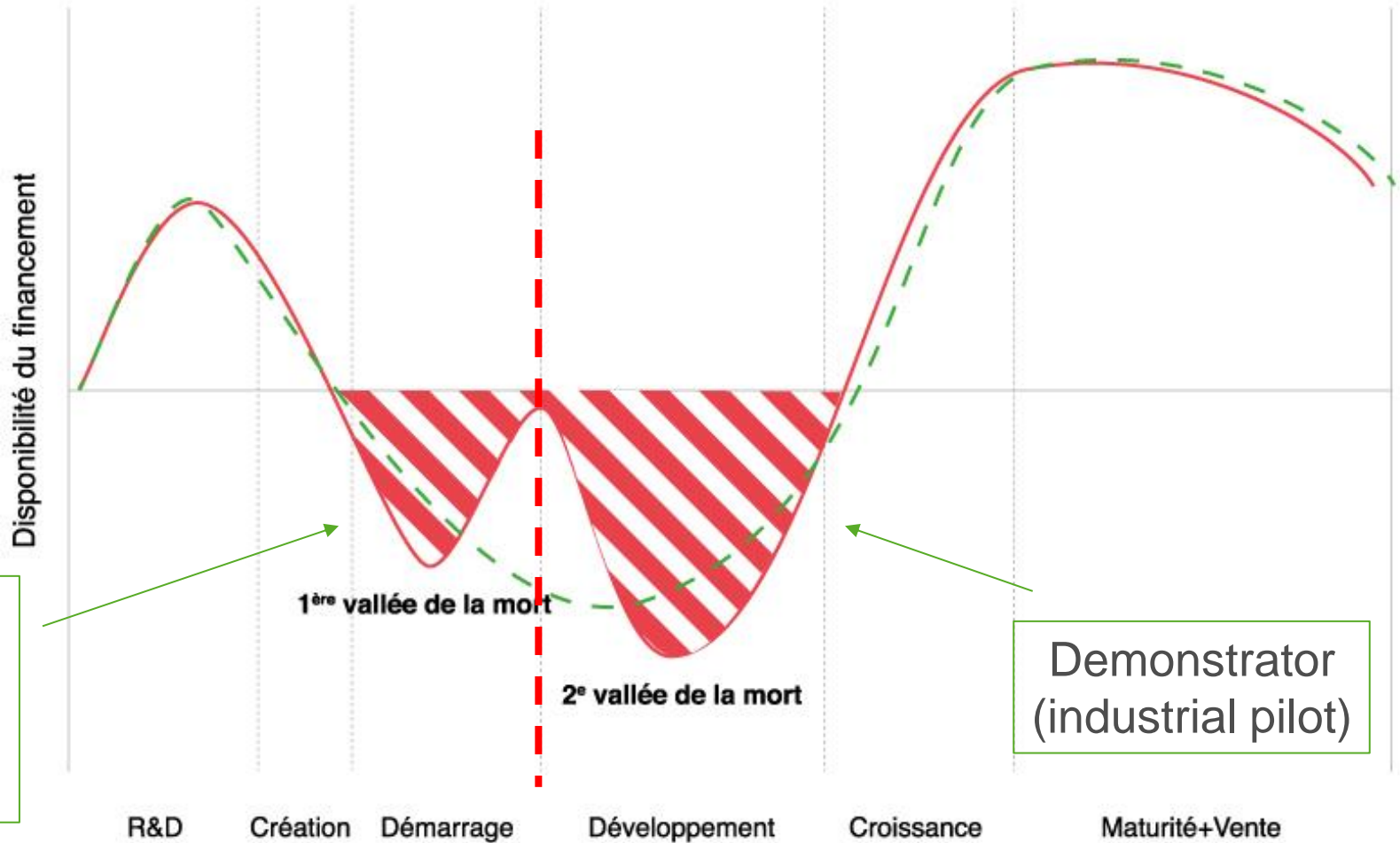


PROJET

START-UP

PME

Stades de développement



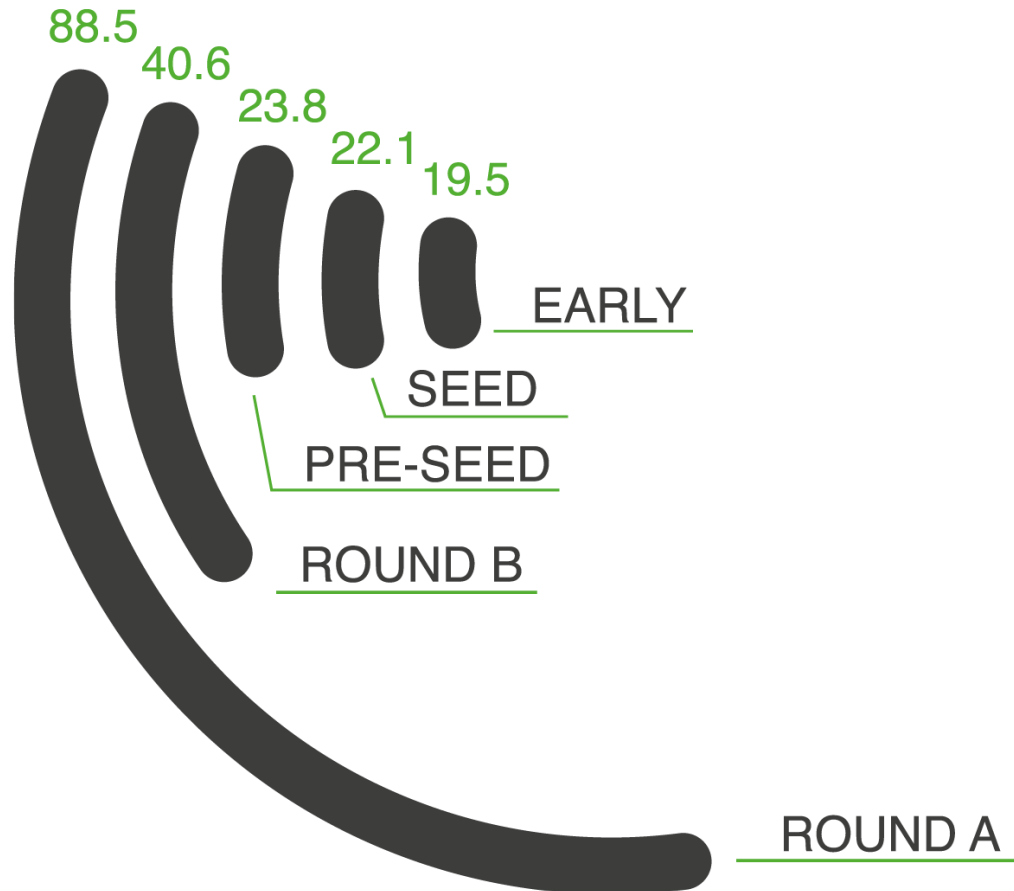
Proof of concept and first pilot

Demonstrator (industrial pilot)

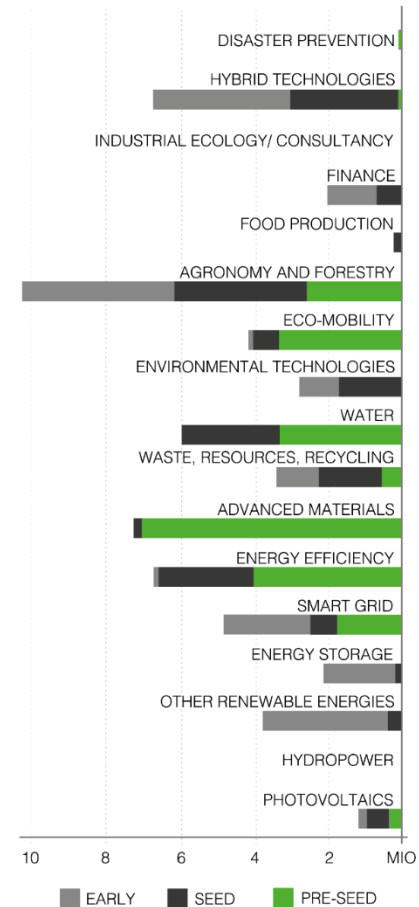
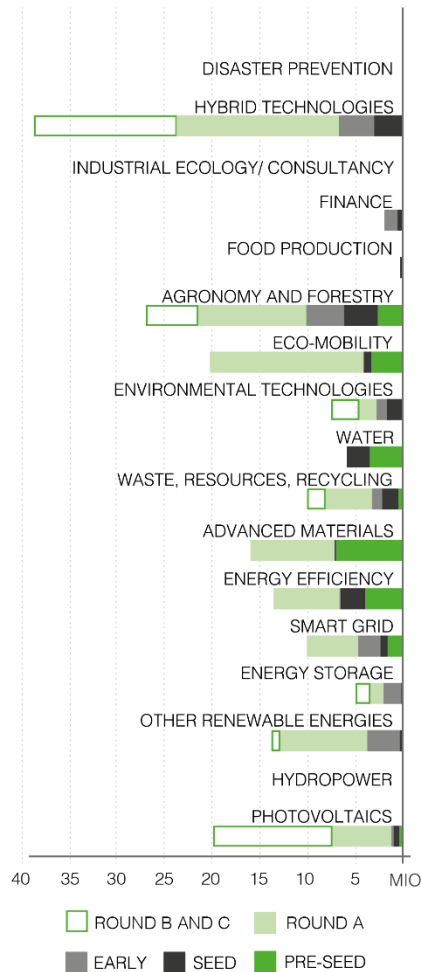
What we observe ...

- > In general, the financing instruments available to cleantech companies are a priori not adapted to their needs at this decisive stage
- > October 2018 ... where do we stand ?

Amounts invested in cleantech start-ups between 2006 and 2016 (in millions CHF)

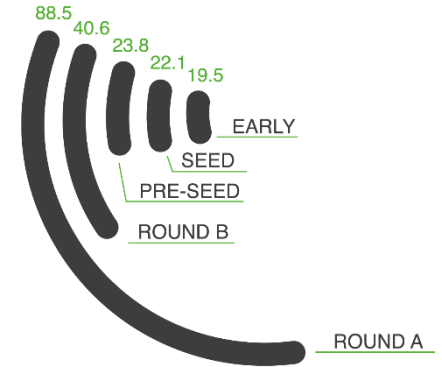


Amounts raised by cleantech start-ups by sectors (period 2006/2016)

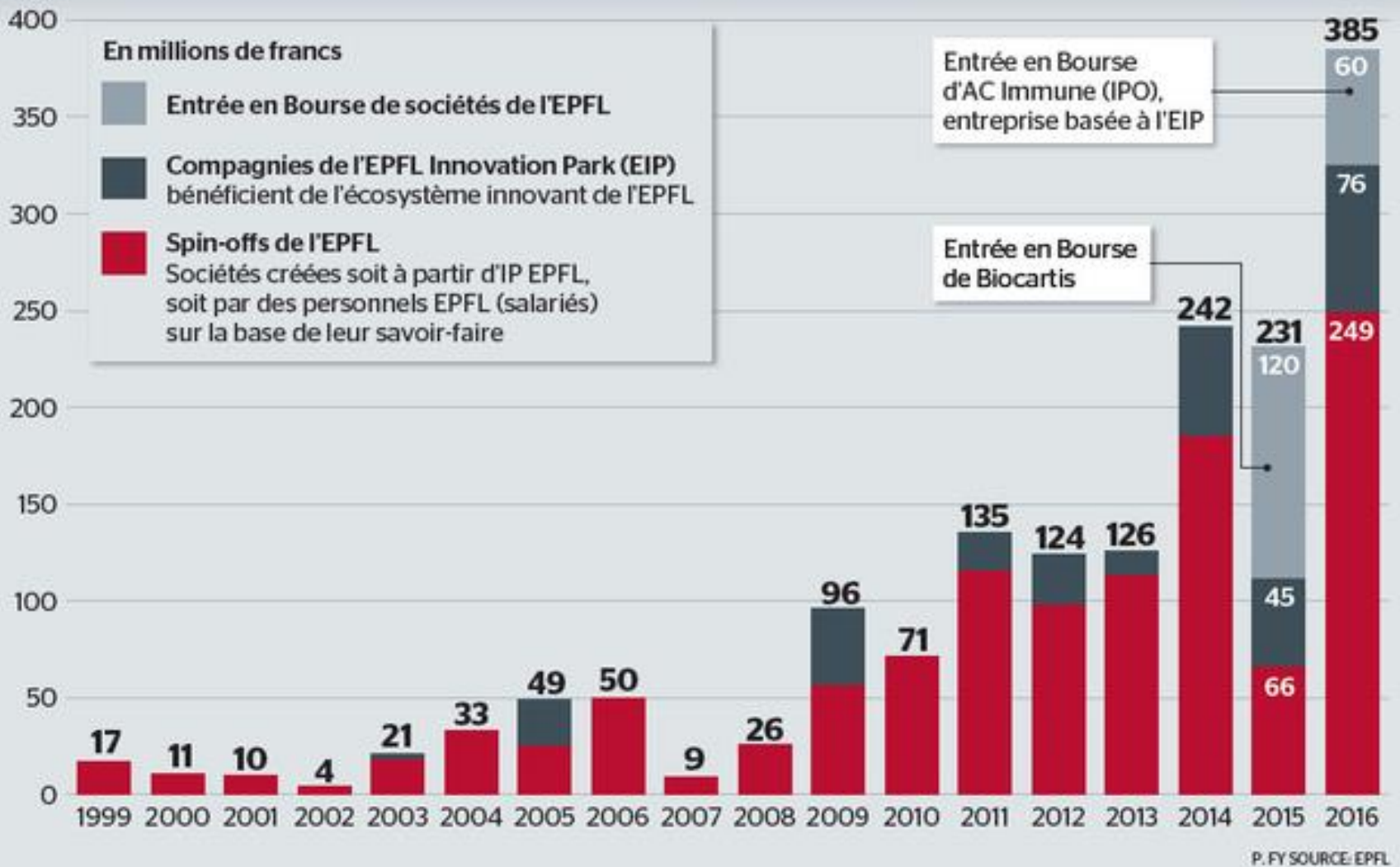


Investment trends

- > 2006/2016: CHF 200 millions (cumulative)
 - › Without M&A, bankruptcy, ...
 - › Underestimation with factor 2 to 3
- > 2017 « Magic number »: CHF 3 millions
- > Fund raised 2018:
 - › Bestmile: \$11 millions - Round A
 - › Ecorobotix: CHF 10.6 millions - Round B
 - › DEPsyst: CHF 2 millions - Round A2
 - › WayRay: \$80 millions - Round C
- > In Switzerland, cleantech expects to follow the Biotech ramp-up with a 15/20 years delay

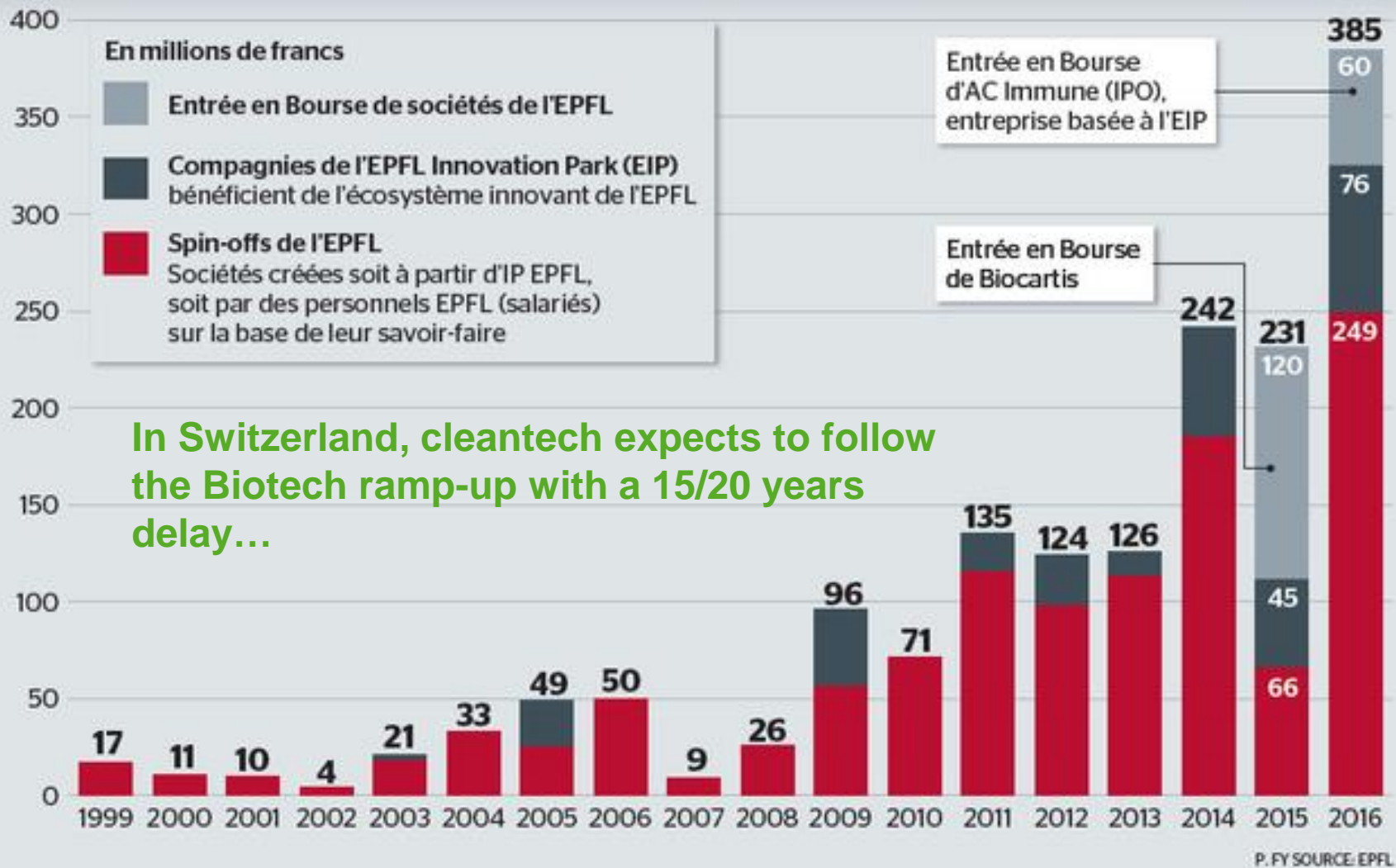


Fonds levés par des start-up de l'EPFL



Source : <https://www.24heures.ch/news/news/pluie-argent-startup-lepfl/story/24269109>

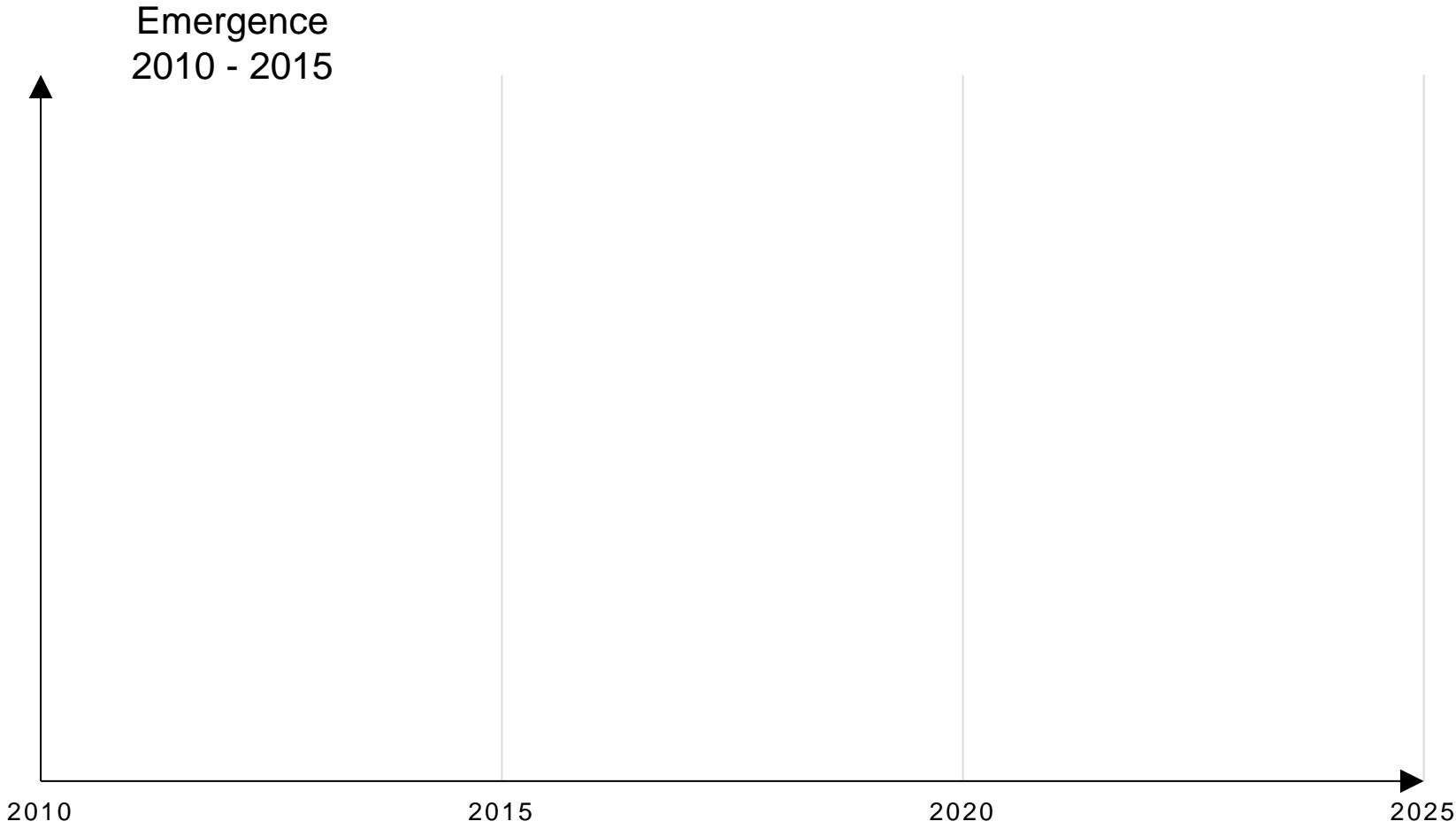
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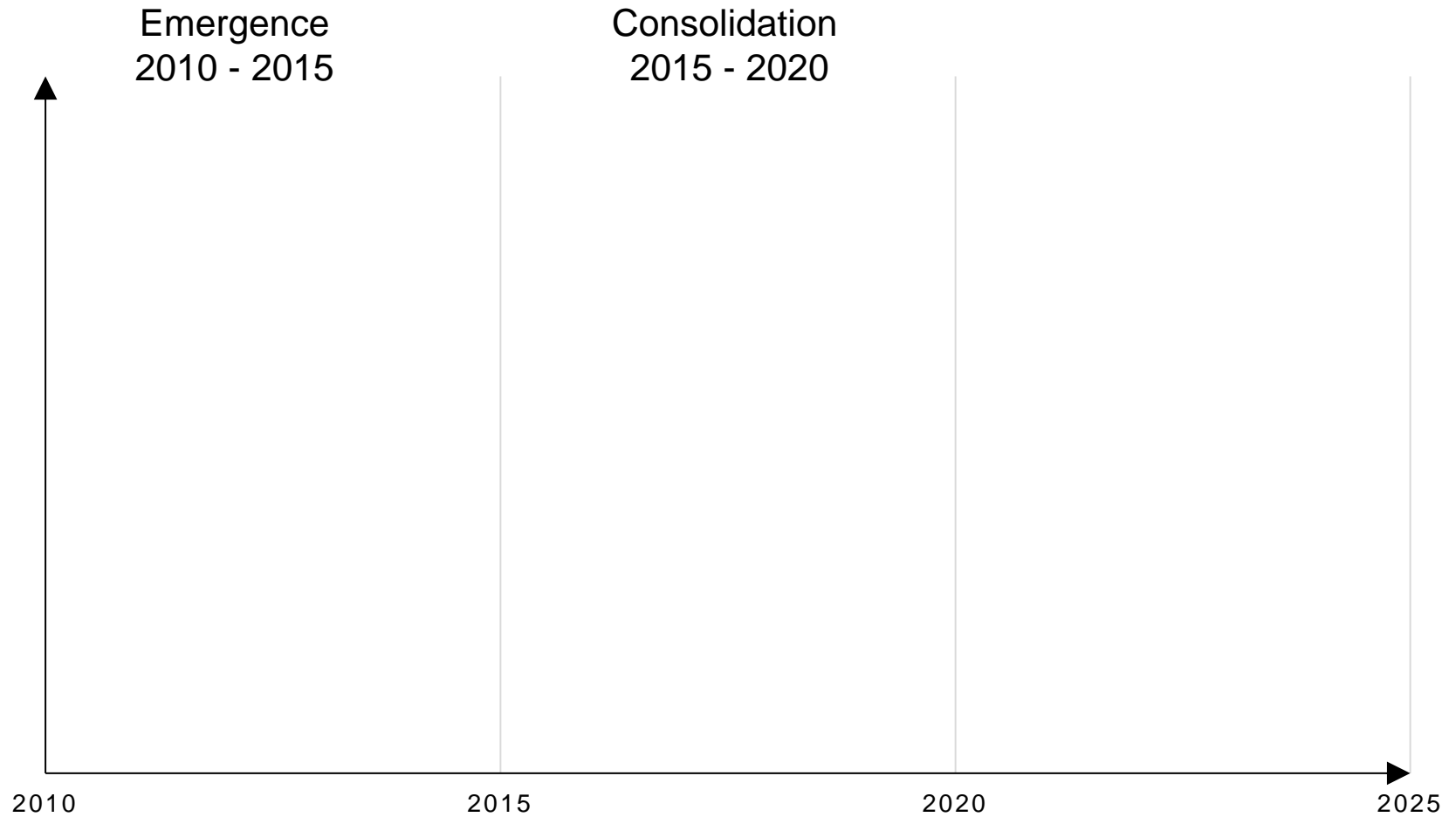
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Where do we go ...

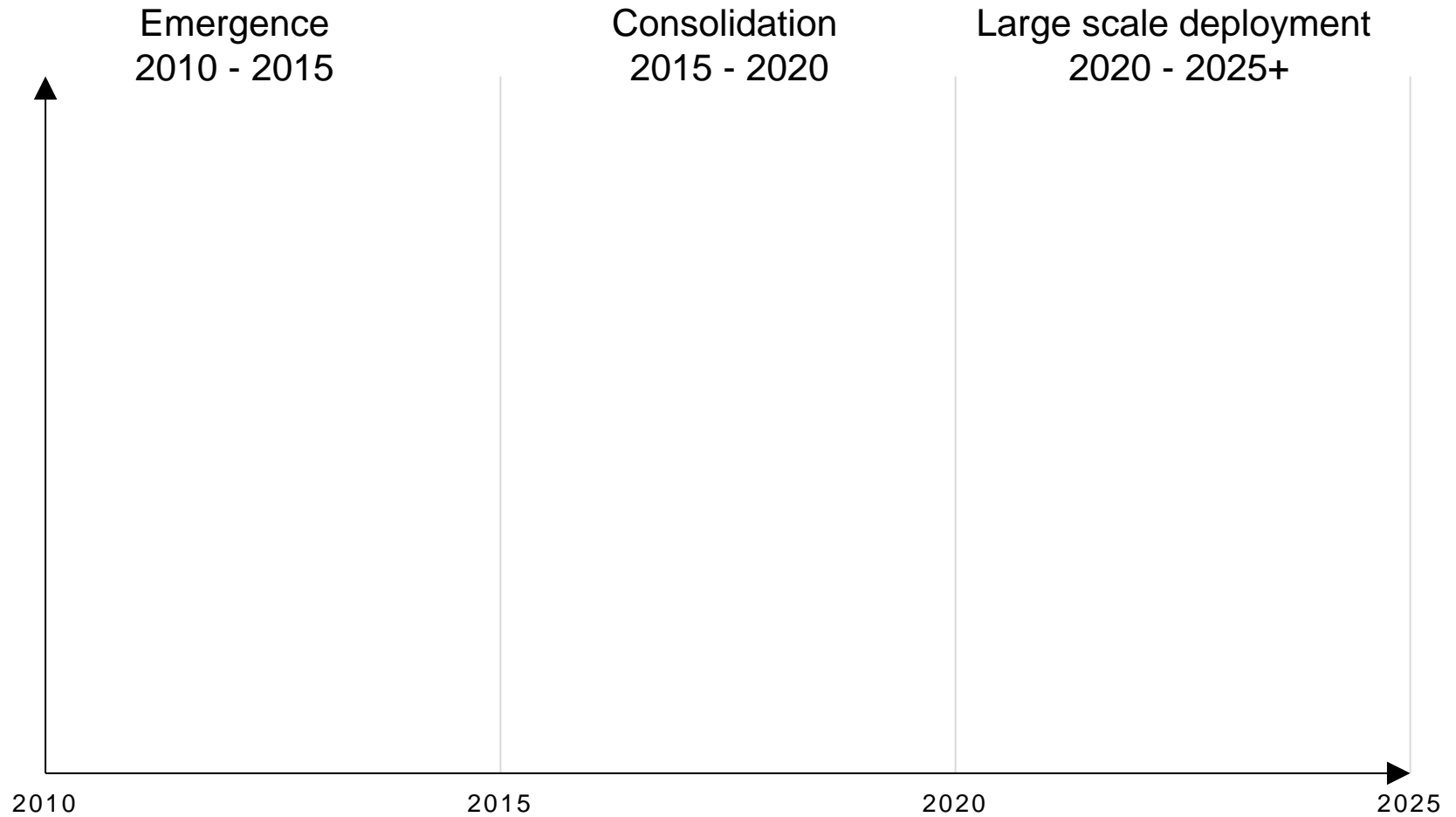
Cleantech development in Switzerland



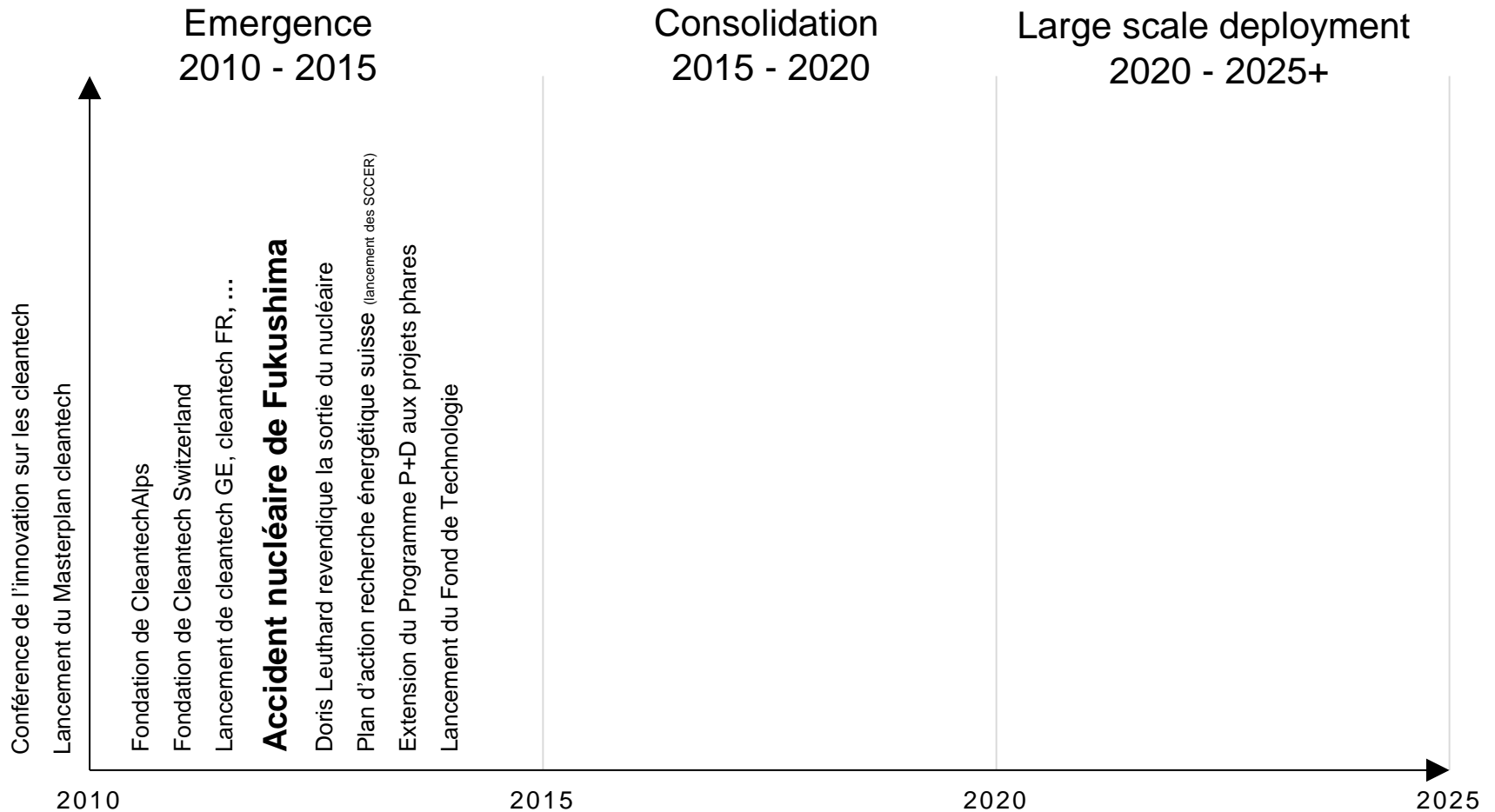
Cleantech development in Switzerland



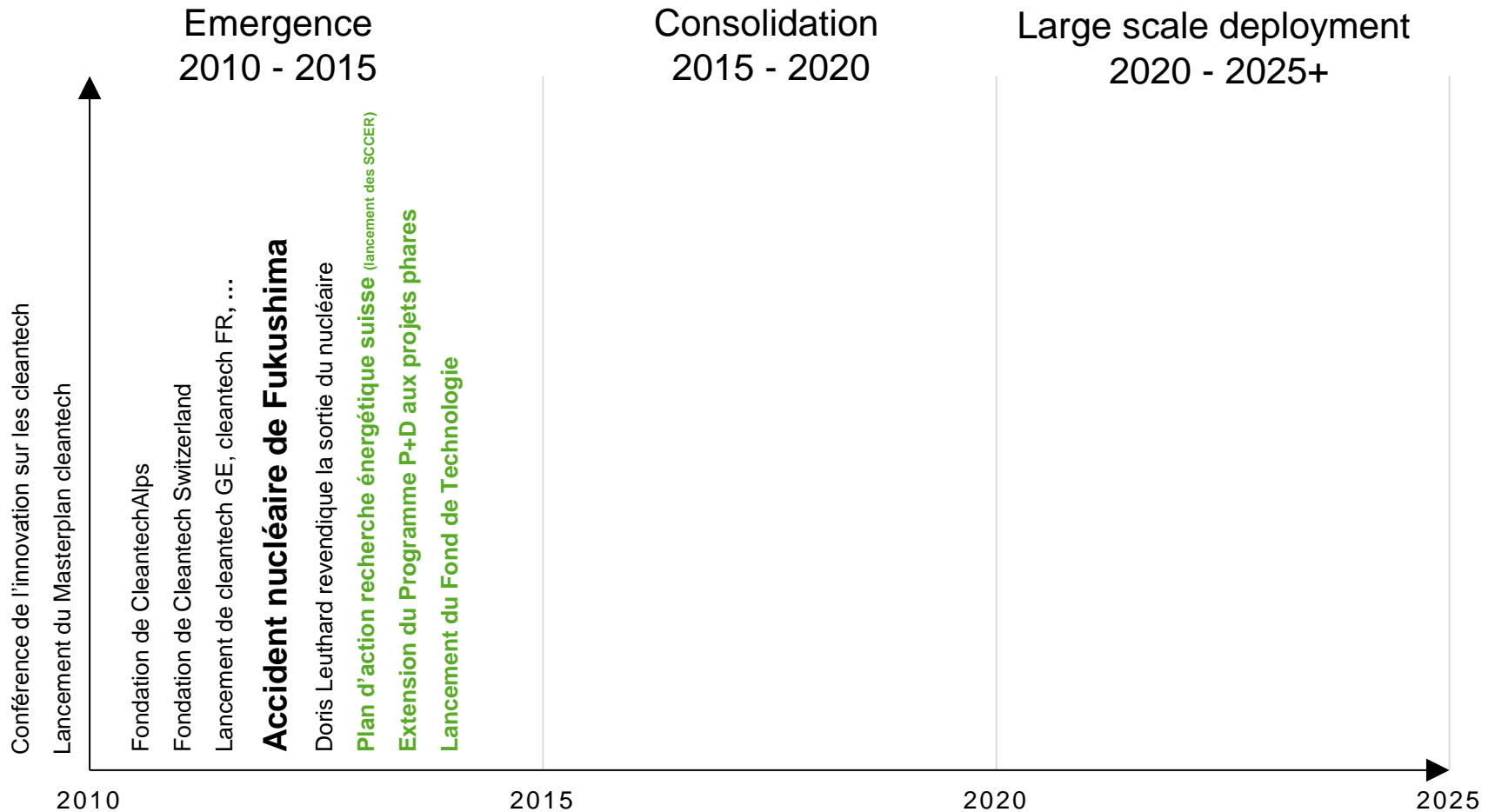
Cleantech development in Switzerland



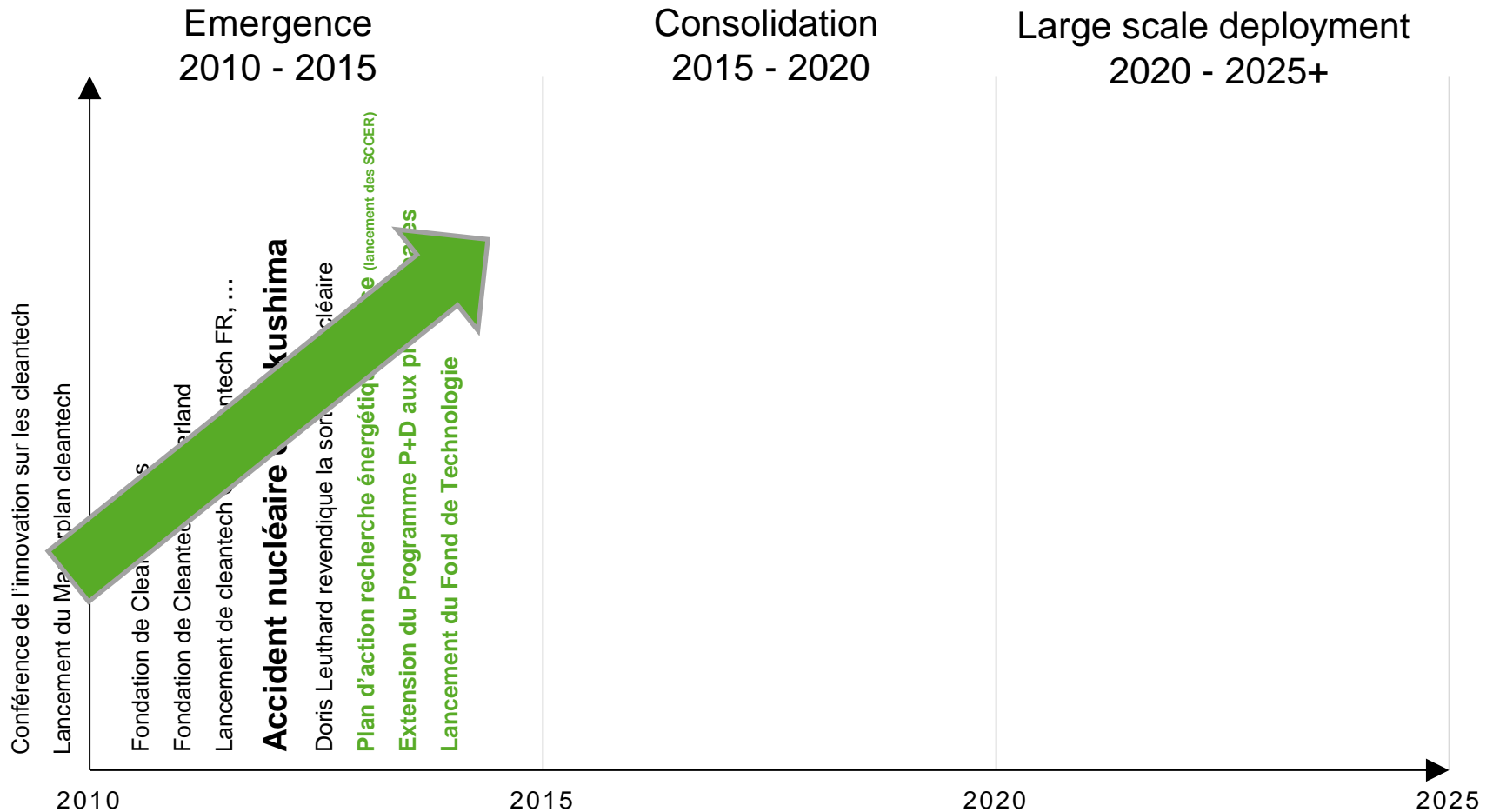
Cleantech development in Switzerland



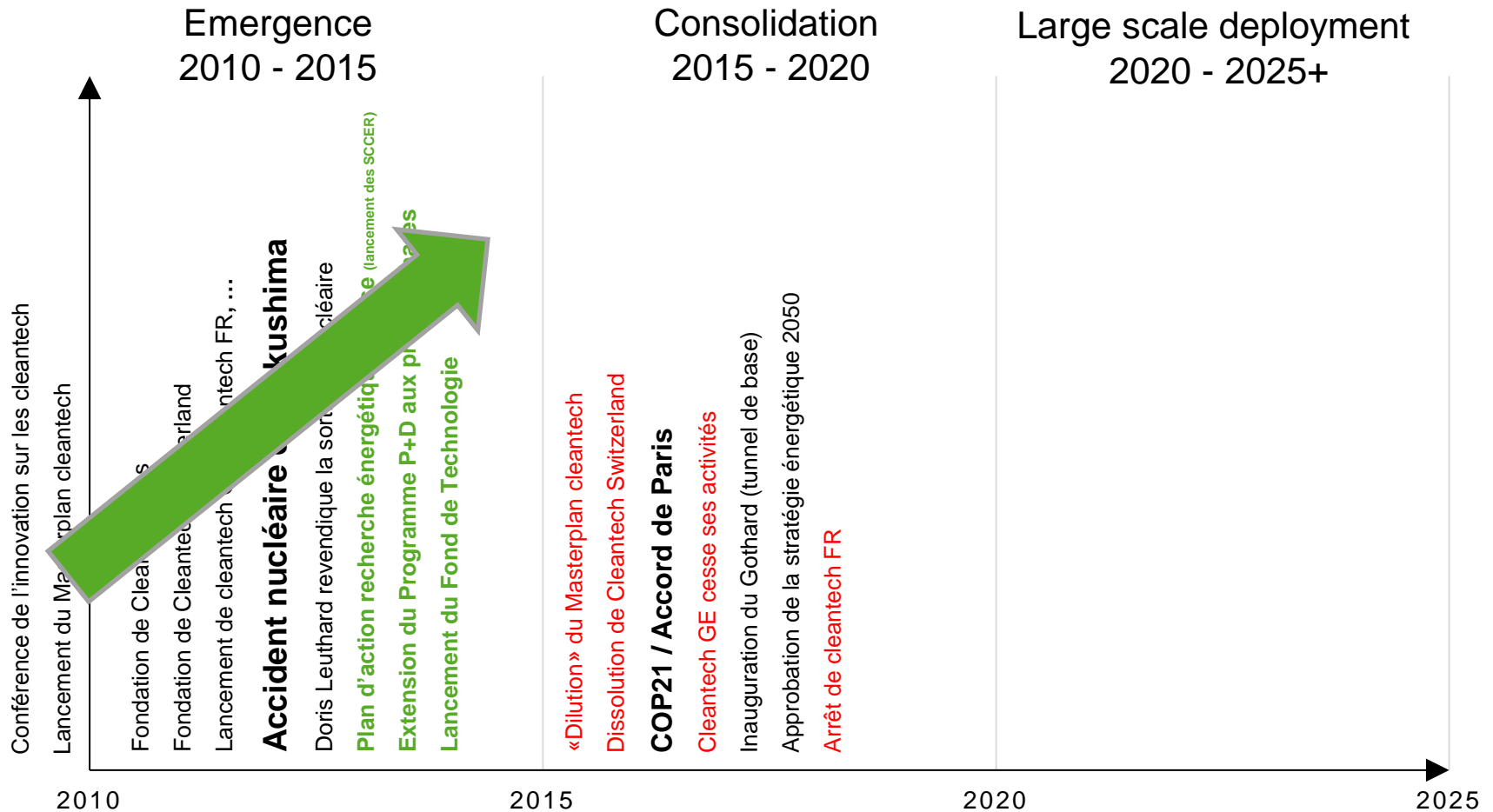
Cleantech development in Switzerland



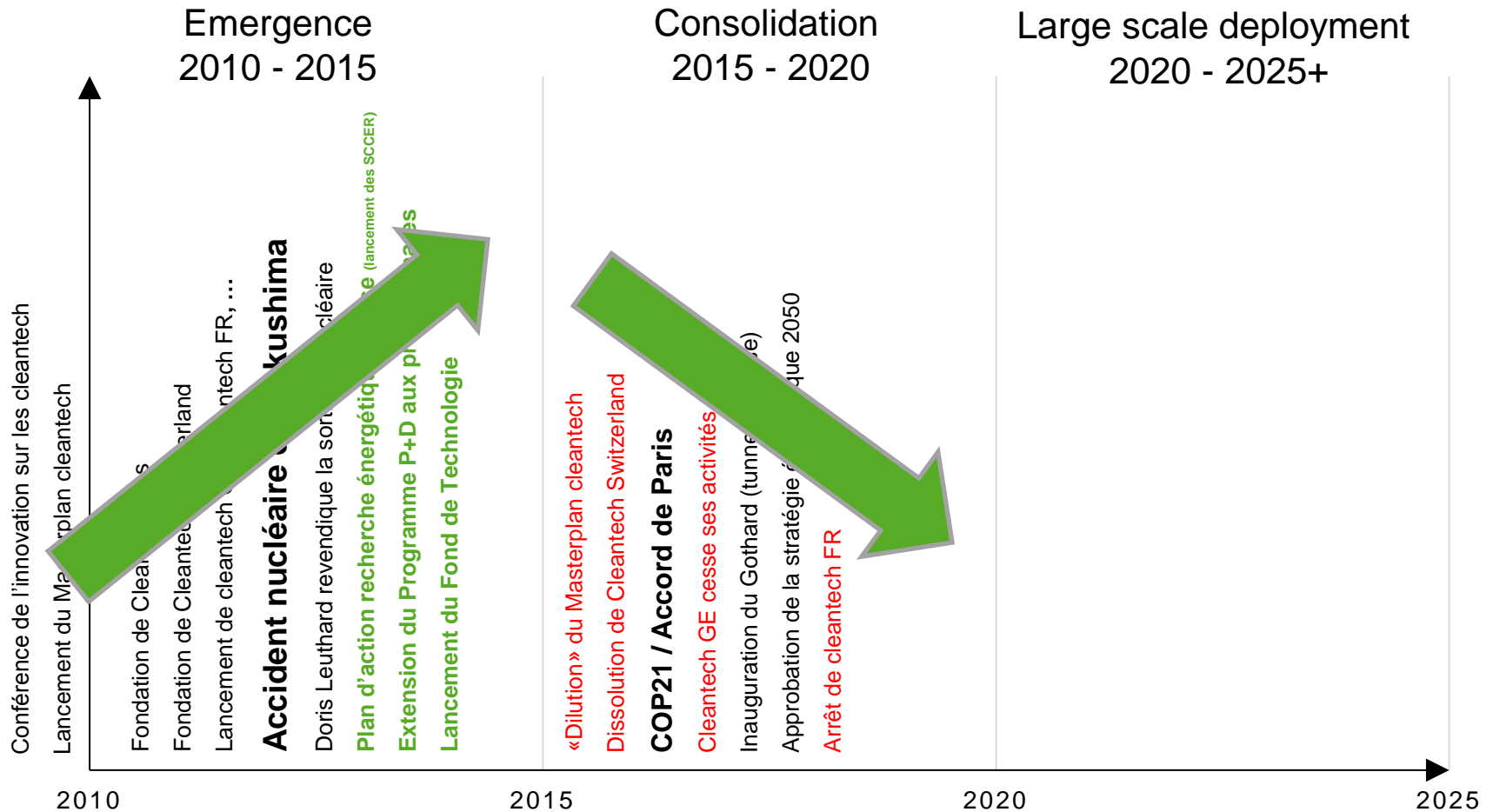
Cleantech development in Switzerland



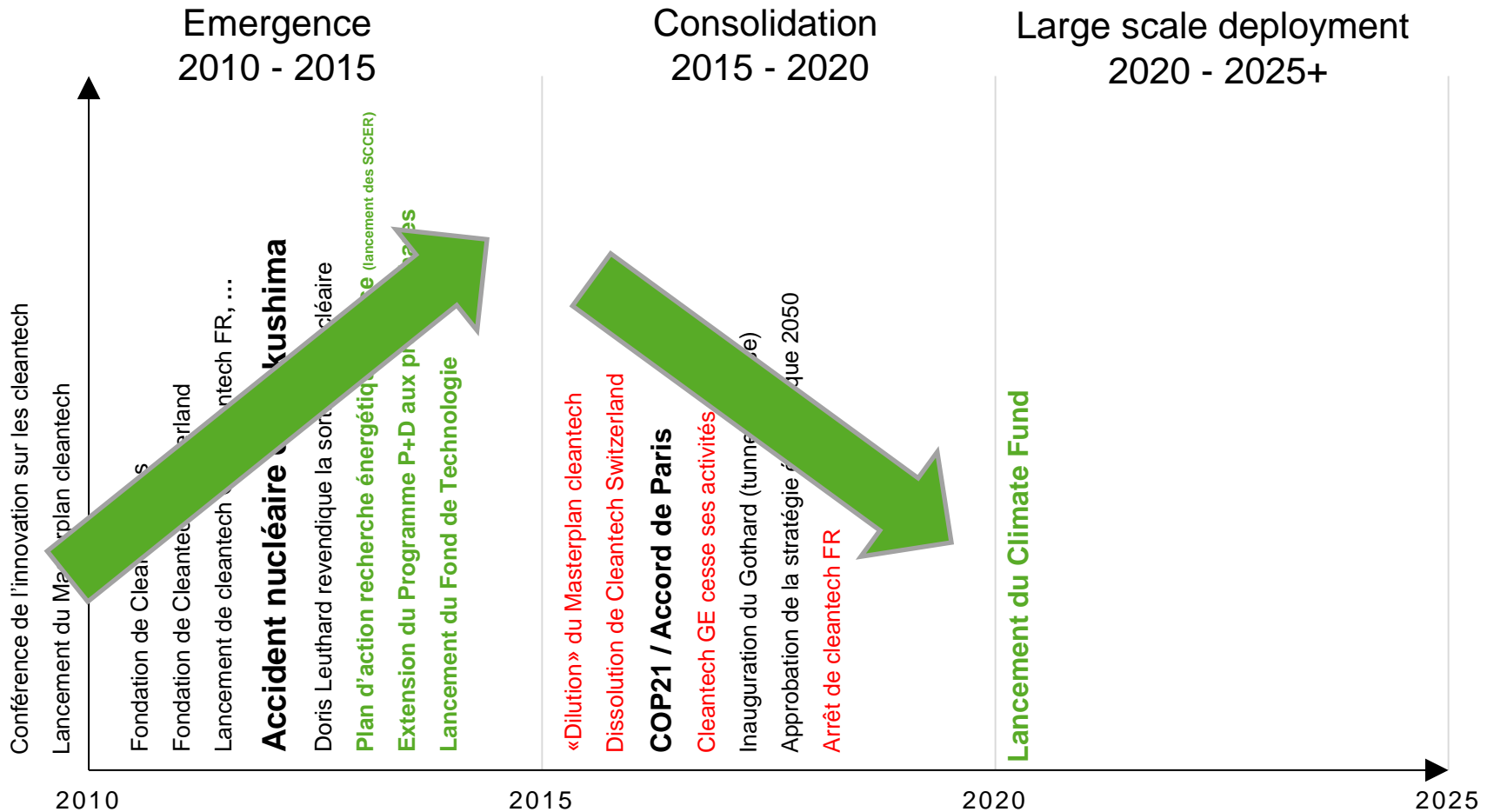
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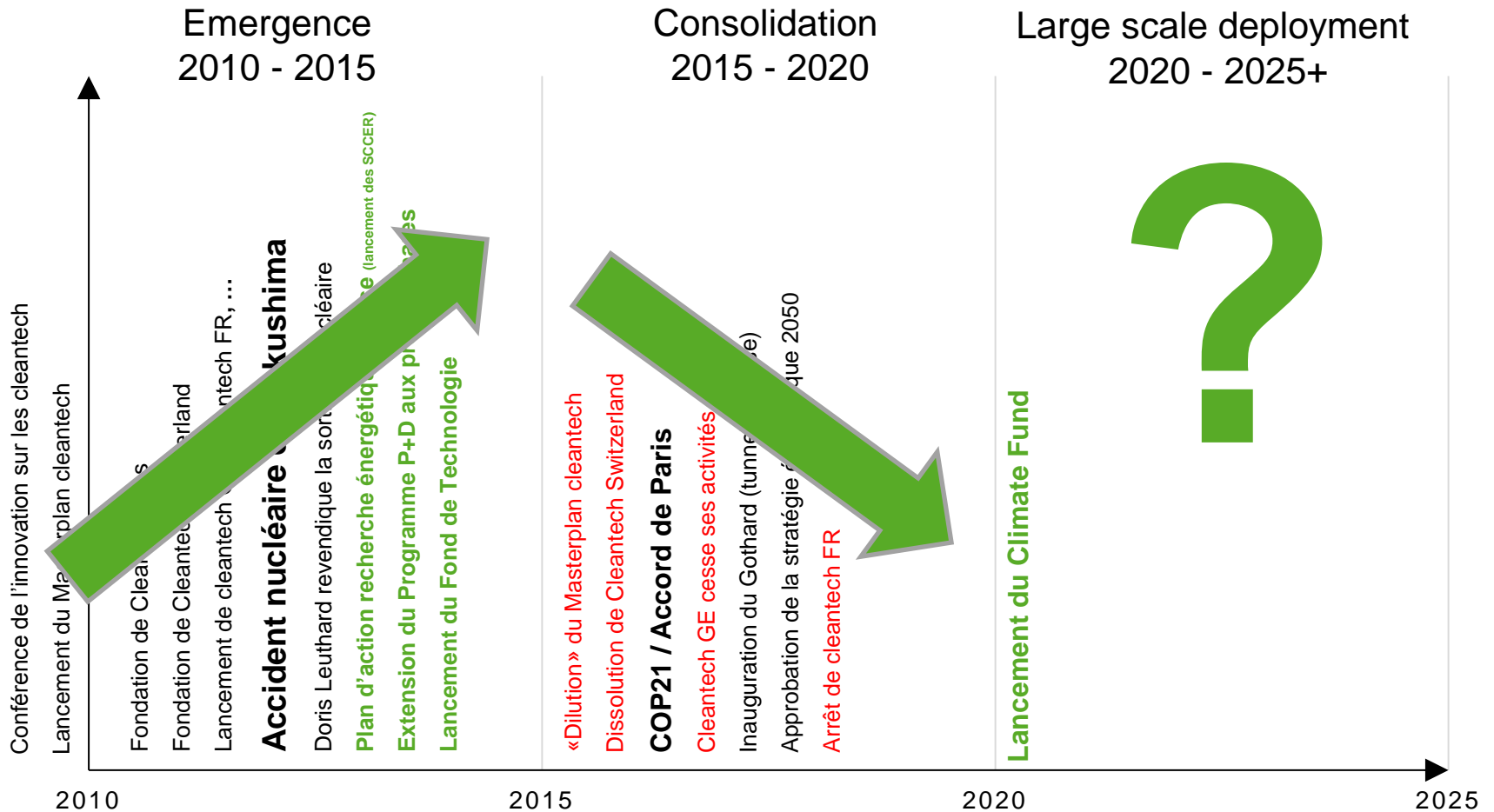
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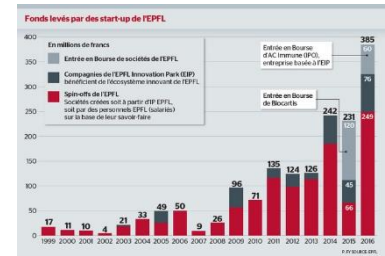
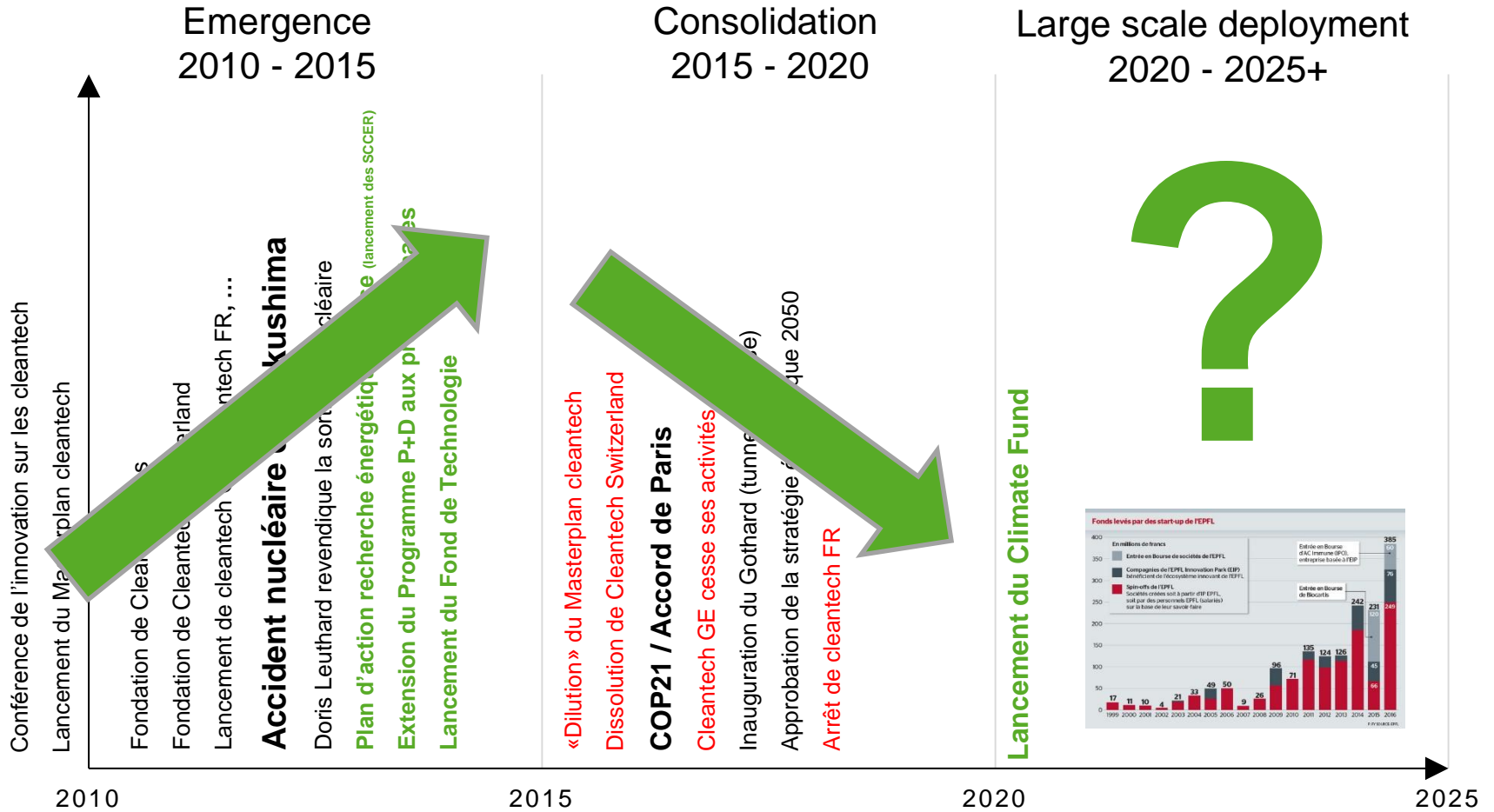
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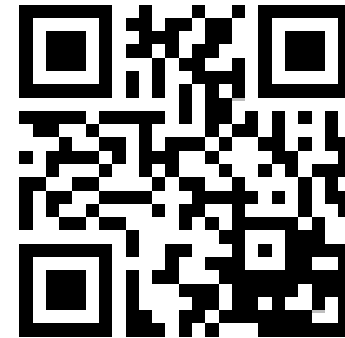
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Cleantech development in Switzerland



Overview of Cleantech Start-ups available on our Mobile App



www.swisscleantechreport.ch

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