

# Knowledge valorisation and tech transfer

Experiences from 20 years of Business Development

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# Wageningen's domain: Food and Living Environment



## Society and well-being



- Food and Living environment
- Lifestyle
- Perceptions
- Governance
- Market and chains
- Social innovations

- Sustainable production and food processing
- Animal feed and biobased products
- International food chains and networks
- Food security and food health aspects



## Food, feed and biobased production



## Natural resources and Living environment

- Nature and landscape
- Land use
- Water, sea and natural resource management
- Biodiversity

# Wageningen University & Wageningen Research

## Wageningen University

- 10.000 students (>100 countries)
- >1,900 PhD candidates
- 2,500 faculty and staff



## Wageningen Research

- 20 market oriented research institutes
- 2,410 staff
- Contract Research Revenue 2016: 635 M EUR
- Global business with leading companies

1

WUR ranking in QS World University  
Rankings 2016-2017  
"Agriculture and Forestry"

### The Top 10 Universities in UI GreenMetric 2018

1 Wageningen University & Research	6 Umwelt-Campus Birkenfeld
2 University of Nottingham	7 University of Groningen
3 University of California Davis	8 Bangor University
4 University of Oxford	9 University College Cork
5 Nottingham Trent University	10 University of Connecticut



180 Companies **On site**

 70  
startups

 100  
MKB

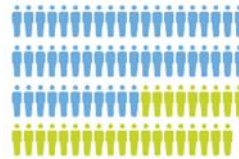
 10  
corporates



7900 Jobs

 5100  
WUR

 2800  
niet WUR



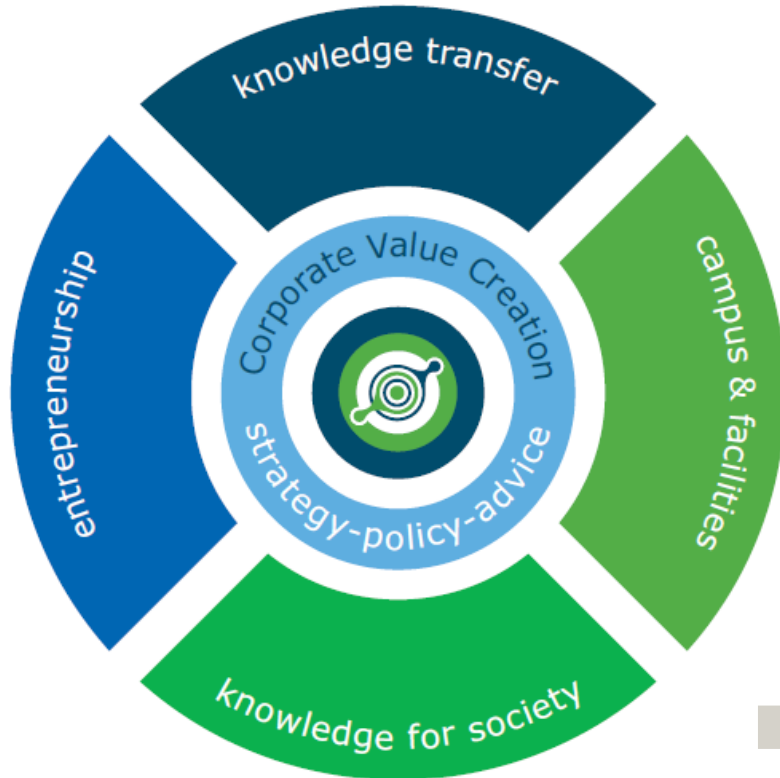
# Wageningen University & Wageningen Research



Unique combination of a world leading university and market-oriented research institutes. And corporates, spin off's, start ups, NGO's, regional development, .. on a modern campus



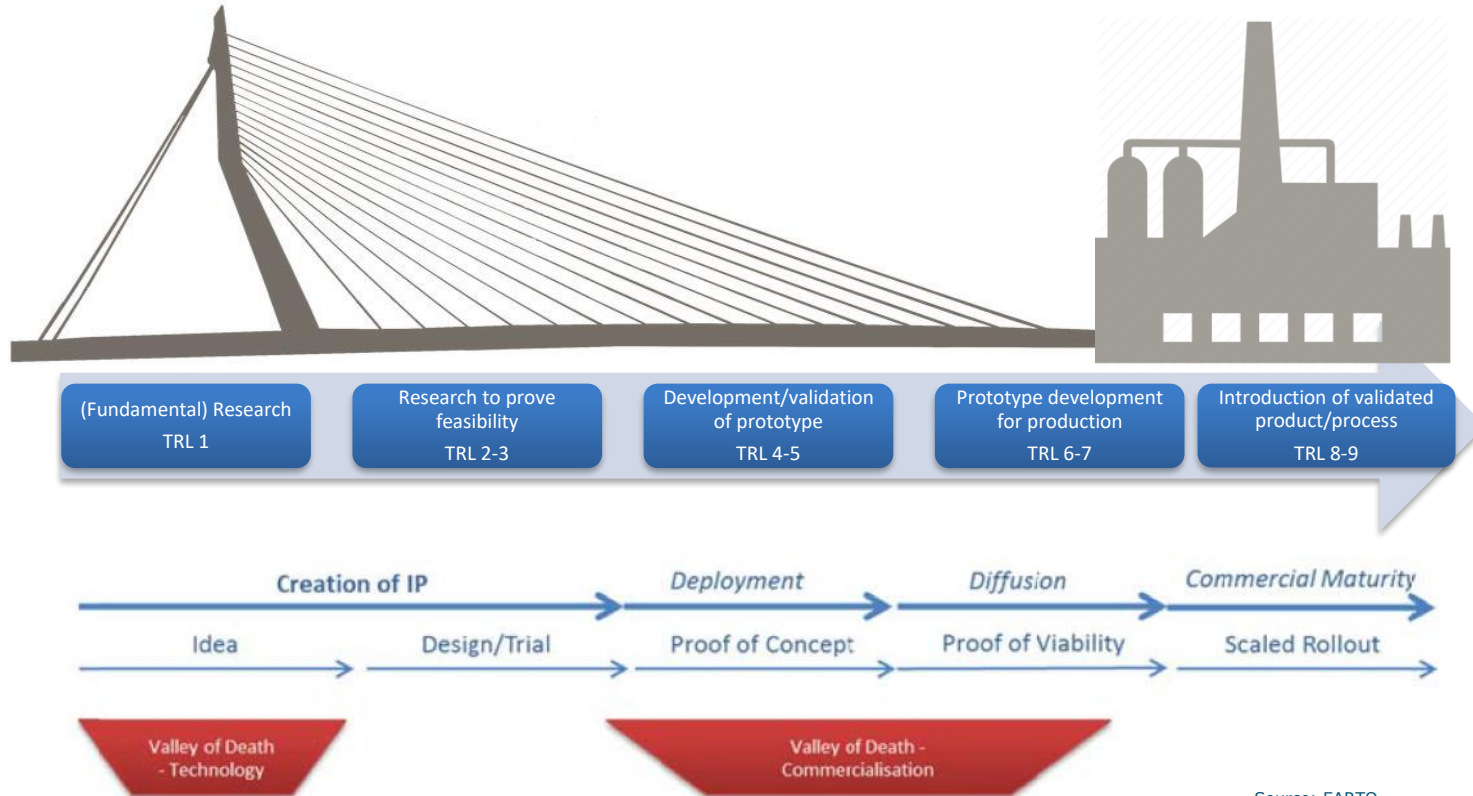
# CVC – corporate value creation WUR



Managing the Eco-system



# Position of WUR in the innovation process



Source: EARTO

# First: Which scenarios for valorisation of IP/knowledge/know how ?

- R&D project(s) ?

- Licensing ? ....  ....        ....

- Sale ?

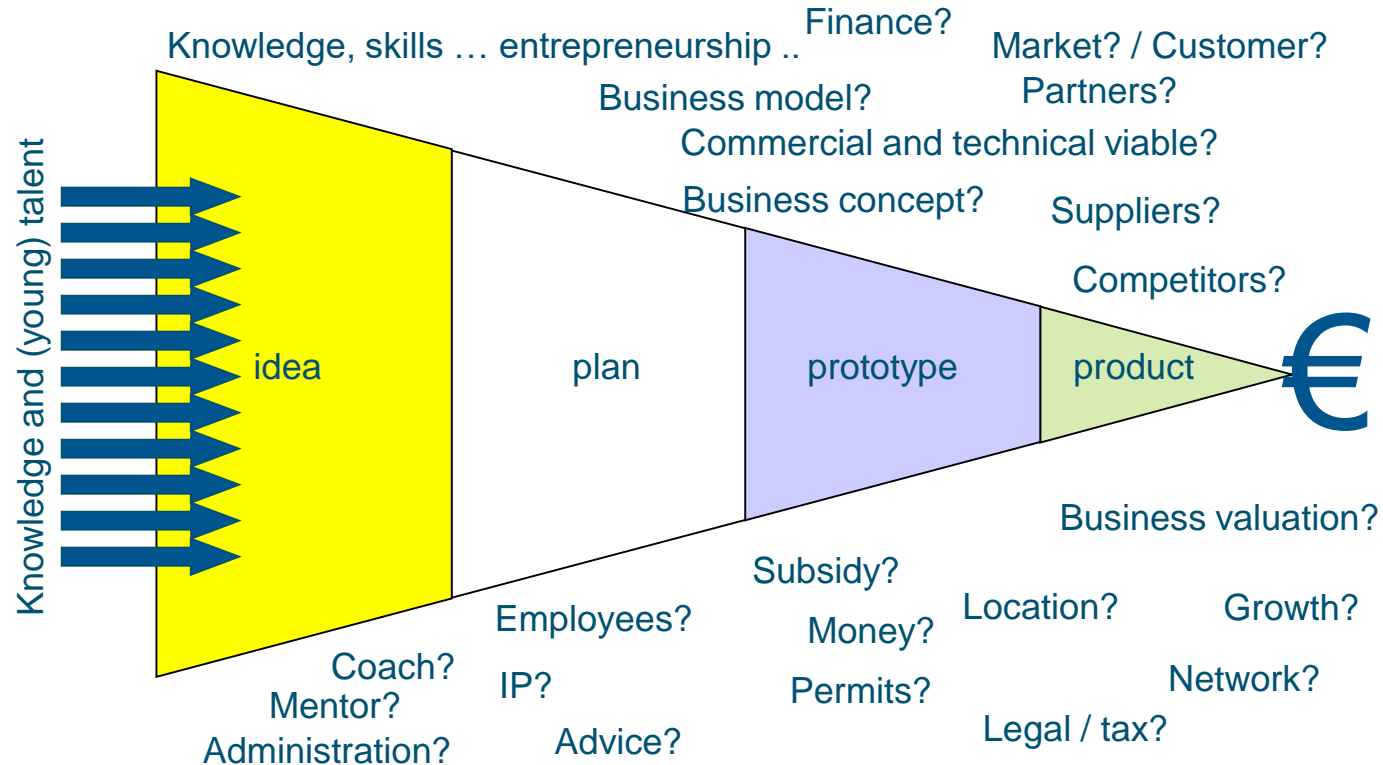


- Spin Off ?

.....

Impact = use of knowledge in practice

# What to consider starting spin off's ....





# 7 steps towards a spin-off company

stage gate guidelines for entrepreneurial WUR personnel (including PhD students)

## 1 Complete and submit an **Invention Disclosure Form (IDF)** or a **Value Creation Form (VCF)**

lead: prospective entrepreneur

- Submit the form to CVC and your SG's contact.
- Discuss with CVC and/or Business Developer and WU-Chair/Business Unit Manager.



## 2 **Request feasibility** assessment: submit A4 concept-plan to the Managing Director SG for approval

lead: prospective entrepreneur

- Summarise your spin-off proposal in one A4 and submit it to the Managing Director SG for approval.
- Inform the Director CVC.



## 3 **Assess and elaborate the spin-off proposal;** elaborate the business plan

lead: VCAT, prospective entrepreneur

- A Value Creation Assessment team (VCAT) is set up by the Director CVC and the Managing Director SG.
- VCAT assesses and supports the (joint) development of the spin-off proposal and the business plan.



## 4 **Submit** the spin-off proposal and the business plan to the Managing Director SG for assessment

lead: VCAT, prospective entrepreneur, CVC

- VCAT & entrepreneur submit spin-off proposal and business plan to the Managing Director SG and CVC.
- CVC submits an advice to the Managing Director SG.



## 5 **Decide on the knowledge transfer to spin-off**

lead: Managing Director SG & Executive Board

- Managing Director SG decides on term sheet, role of employee & conflicts of interest.
- Executive Board decides on full transfer or exclusivity of IPr and/or equity participation in the spin-off (on proposal of Managing Director SG and Director CVC).



## 6 **Formalise arrangements** with WUR

lead: Director CVC

- The arrangements as agreed on in the approved spin-off proposal are formalised by WUR and the spin-off company in formation (final agreements).



## 7 **Formalise establishment of the spin-off company**

lead: entrepreneur/founders

- Company formation at the Chamber of Commerce.

1

In the case of a potential spin-off company based on a new idea/invention that is not yet protected (by a patent, plant breeding rights, etc.), use the **confidential IDF**.

In the case of a potential spin-off company based on protected or public WUR-knowledge, use the **confidential VCF**.

Forms are available on [intranet](https://intranet.wur.nl).

Corporate Value Creation (CVC): [valuecreation@wur.nl](mailto:valuecreation@wur.nl)

3

The VCAT consists of representatives of:

- CVC
- Business Development SG
- SG/Corporate legal
- SG/Corporate finance
- External advisor(s) (optional)

VCAT and prospective entrepreneur elaborate the spin-off proposal, including (draft):

- Term sheet: IP/knowledge transfer arrangements with WUR
- Identification & mitigation conflicts of interest
- Arrangements on access and use of WUR assets (optional)
- Shareholder arrangements (optional)

The prospective entrepreneur elaborates and provides:

- Draft business plan
- Organisational structure (Management Team)
- Letter of endorsement (Chair Group/Business Unit)

6

The respective WUR departments advise Director CVC:

- IP licencing and contractual agreements (BD SG & SG/Corporate Legal)
- Agreement on avoidance of conflicts of interest (SG Legal)
- Agreement on access and use of WUR assets (BD SG)
- WUR's equitable interest, articles of association and role in the spin-off company (Corporate Legal)

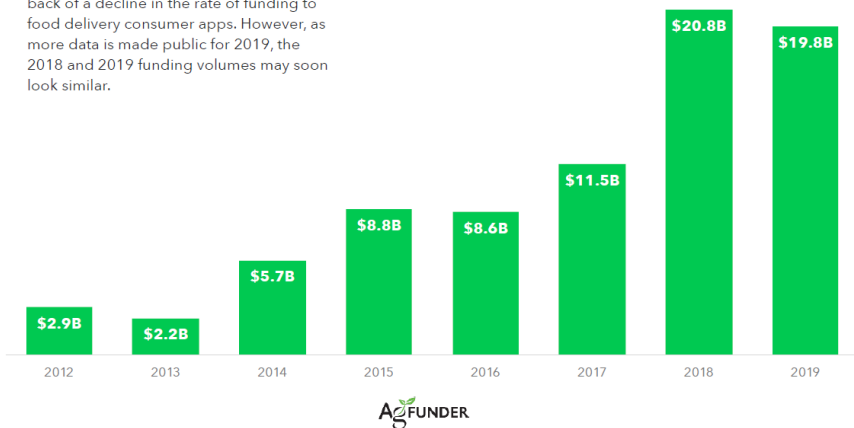
Agreements are to be signed by the Executive Board.

# The potential ...it is a shift: growth in VC funding & corp.venturing

## Upstream + Downstream

### Annual Financings | 2012-2019

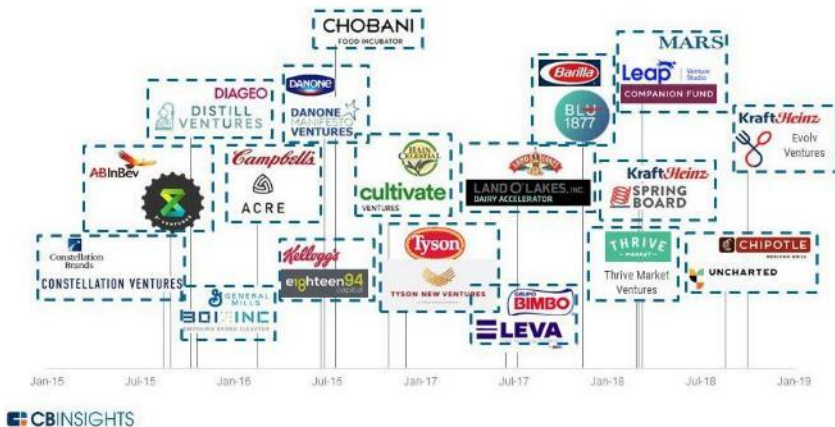
Funding to agrifood tech startups dipped nearly 5% year-over-year to 2019 on the back of a decline in the rate of funding to food delivery consumer apps. However, as more data is made public for 2019, the 2018 and 2019 funding volumes may soon look similar.



## YEAR IN REVIEW

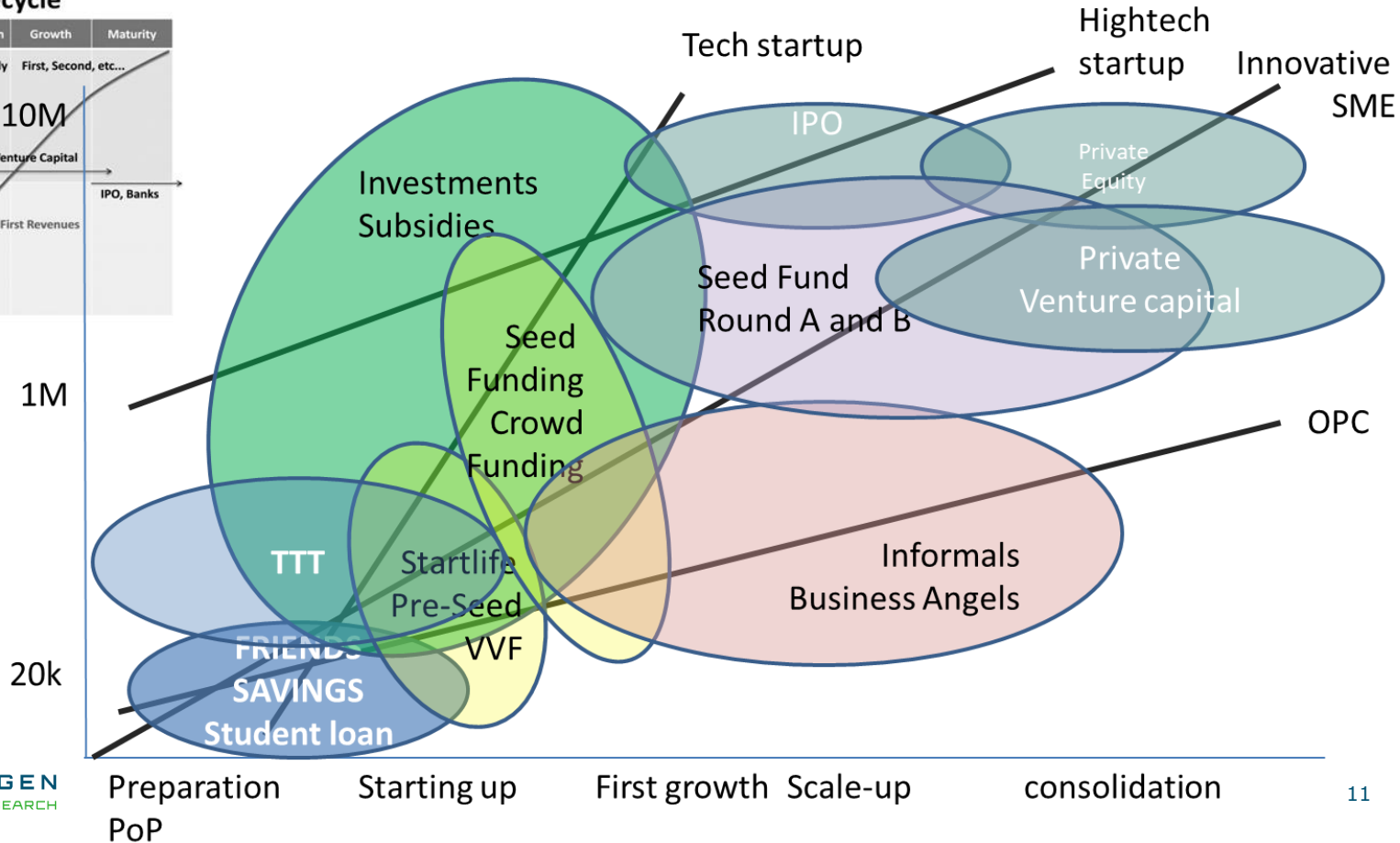
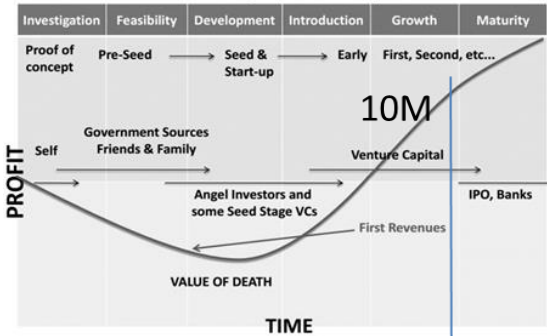
### CPG leaders launch startup investment funds

Timeline of venture fund and incubator launches by announcement date; excludes incubator partnerships



# Finance - Never enough?

The Capital Lifecycle




# Example of funding: Green Protein case



# 1. Patent application

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ip

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Refine search → Results → US2015335043 (A1)

US2015335043 (A1)

**Bibliographic data**

Description  
Claims  
Mosaics  
Original document  
Cited documents  
Citing documents  
INPADOC legal status  
INPADOC patent family

**Quick help**

- What is meant by high quality text as facsimile?
- What does A1, A2, A3 and B stand for after a European publication number?
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- Why do I sometimes find the abstract of a corresponding document?

**Bibliographic data: US2015335043 (A1) — 2015-11-26**

★ In my patents list Report data error Print

**ECONOMICAL PROCESS FOR THE ISOLATION OF FUNCTIONAL PROTEIN FROM PLANTS**

**Page bookmark** [US2015335043 \(A1\) - ECONOMICAL PROCESS FOR THE ISOLATION OF FUNCTIONAL PROTEIN FROM PLANTS](#)

**Inventor(s):** DE [JONG](#) GOVARDUS ADRIANUS HUBERTUS [NL]; [GEERDINK](#) PETER [NL]; [BUSSMANN](#) PAULUS JOSEPHUS THEODORUS [NL]; HYLKEMA NIENTKE [NL] ±

**Applicant(s):** TNO [NL] ±

**Classification:**

- international: [A23J1/00](#); [A23J3/14](#); [A23J3/22](#); [A23L1/00](#); [A23L1/035](#); [A23L1/305](#); [B01D11/00](#); [B01D15/08](#); [B01D61/14](#); [C12N9/88](#)
- cooperative: [A23J1/006](#); [A23J1/007](#); [A23J3/14](#); [A23J3/22](#); [A23L29/10](#); [A23L33/105](#); [A23L33/185](#); [A23P30/40](#); [B01D11/00](#); [B01D15/08](#); [B01D61/145](#); [B01D61/147](#); [C12N9/88](#); [A23V2002/00](#); [C12Y401/01039](#)  
→ more

**Application number:** [US201314654947](#) 20131220 [Global Dossier](#)

**Priority number(s):** [EP20120199355](#) 20121224; [WO2013NL50943](#) 20131220

**Also published as:** [CA2896227](#) (A1); [EP2634187](#) (A1); [WO2014104880](#) (A1).

**Abstract of US2015335043 (A1)**

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## 2. Project funding



Horizon 2020  
European Union Funding  
for Research & Innovation

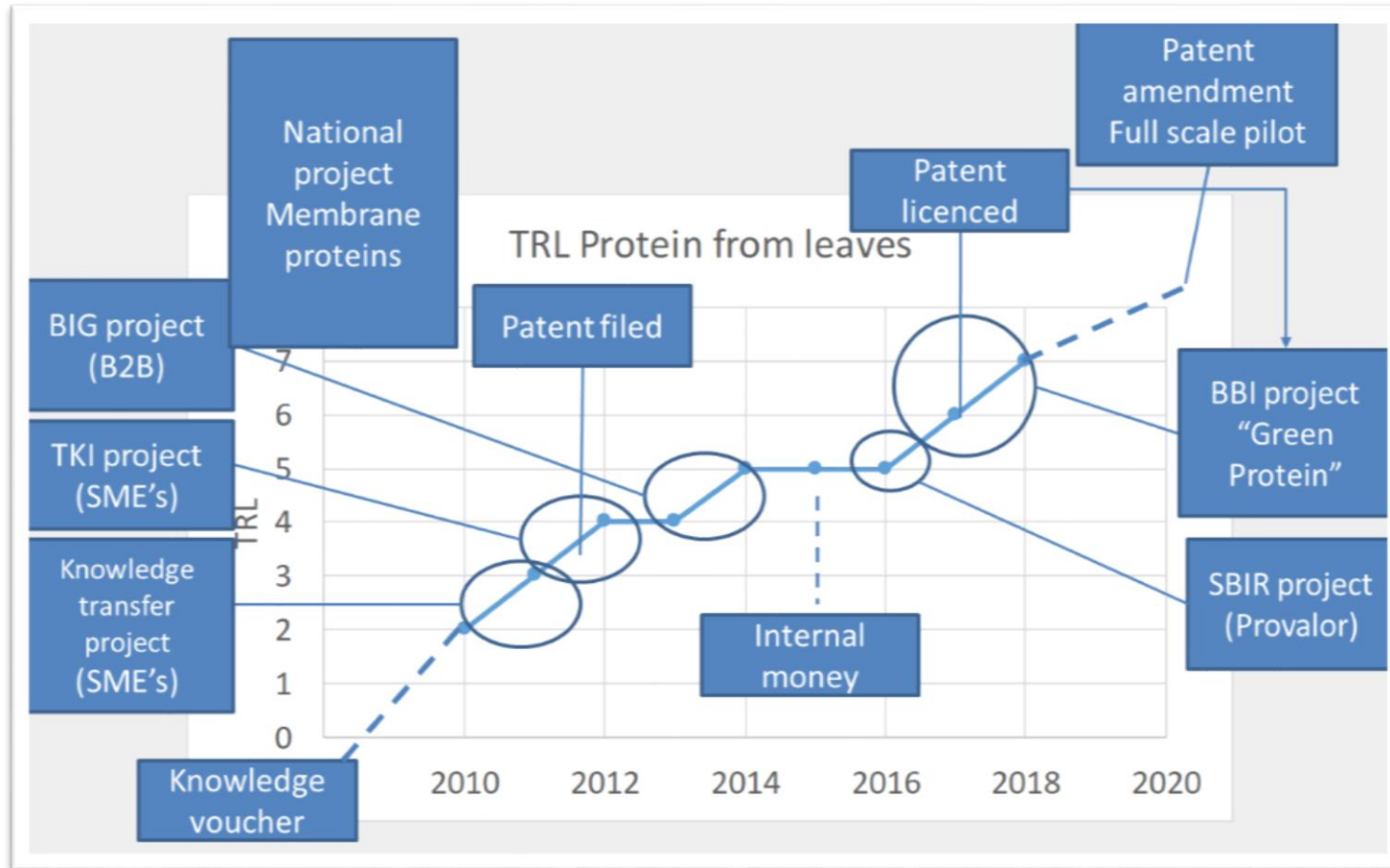


Budget: 5,5 M€  
Timing: 4,5 year

9 partners from 5 countries will realize a demonstration plant for the production of functional leaf protein from a fresh salad processing plant.



### 3. Technology readiness development over time



# 4. Market entry: Accelerating GreenProtein – faster to the market

## Learnings:

- It is never all linear and predictable development process
- Cosun partner in Icos Capital Fund was crucial
- Sustainable Proteins are a Strategic investment theme
- GreenProtein buy-out to Cosun
- Updated license agreement with WUR

### GreenProtein

Royal Cosun is to strengthen its innovative power by investing more in start-ups. Its first acquisition is GreenProtein B.V., a technology start-up that has developed a process to extract high-added value proteins from green leaves. Cosun will also participate in the Icos Capital Fund III, an international investment fund specialising in start-ups in the biochemical and agrifood sectors and their digitisation.

**GreenProtein B.V.** of Wageningen, the Netherlands, has developed a process to extract RuBisCo, a high-value added protein, from green leaves such as sugar beet leaves. The protein can be used as a food ingredient.

The company will be positioned as part of Suiker Unie, which will also head the [GreenProtein](#) European collaborative project\*. "GreenProtein evidently complements our mission of maximising the value of all sugar beet components. It will also help meet the growing demand for vegetable proteins," according to Paul Mesters, CEO of Suiker Unie.

The cooperative's participation in Icos Capital Fund (ICF III) will give Cosun access to expertise on relevant developments in the sector and to a large international network of young, innovative start-ups as potential partners in innovative projects. "With the world changing faster than ever before, early access to start-ups is vital for a productive innovation climate," explains Frank van Noord, Cosun's new director of innovation. "Participation in ICF III will sharpen our external focus and help us accelerate the time to market of our own projects."

In addition to Cosun, Nouryon (formerly AkzoNobel Specialty Chemicals) and the Bühler Group of Switzerland have taken part in the fund as strategic investors.

# Take home messages

- Build an eco-system
- Develop knowledge transfer policies
- Support with professionals
- Focus on strategic themes
- R&D subsidy shifts towards tangible (new) businesses rather than projects
- Funding is out there!

# Thank you for your attention!

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