



Challenge-Driven Innovation

*Societal Challenges as
Opportunities for Growth*

VINNOVA

How can we turn societal challenges from threats into opportunities?

The world faces a number of global societal challenges related to climate, energy, environment and demographics, but also to social security, health and education. The thing that these challenges have in common is that they are all clearly international in character, that they transcend sectorial and disciplinary boundaries and that they are high ranking on political agendas worldwide.

While these challenges seriously threaten the future of our societies, they also constitute a demand for innovative solutions. Addressing these challenges requires both finding a solution to the problems and creating growth.

Societal challenges will not be solved by traditional inventions within individual research fields or sectors. We need incentives to shift the focus from 'silo thinking' to increased cooperation between policy areas, between different fields of research and between various private and public players.

Vinnova, Sweden's innovation agency, therefore launched the programme Challenge-Driven Innovation – Societal Challenges as Opportunities for Growth, in 2011. We are convinced that Sweden have the prerequisites necessary to be at the forefront when it comes to developing innovative solutions for societal challenges. The programme will deliver real innovation to tackle societal challenges as well as bringing actors from the innovation system to work more proactively and systematically in this area.

Societal challenges

Projects greenlighted in the programme Challenge-Driven Innovation must meet one or several of the following societal challenges:

**COMPETITIVE
INDUSTRIES**

**FUTURE
HEALTHCARE**

**INFORMATION
SOCIETY**

**SUSTAINABLE
ATTRACTIVE CITIES**

Projects dealing with societal challenges often have:

- a comprehensive approach, with technology as just one element,
- broad groupings, in which users and customers are often key actors,
- a strong emphasis on utilisation.

Programme rationale and funding

Our programme's vision is to fund projects of international eminence and develop sustainable solutions to tackle key societal challenges.

Greenlighted projects are funded in three stages, each more competitive than the last. As risks lessen and results become better established, so the involvement of the actors must increase.

1

STAGE 1 INITIATION

Duration: approximate 9 months.

Focus: further development of concept and grouping.

Grant: SEK 500,000 maximum.

Grant as a proportion of total project costs:
80 percent maximum.

2

STAGE 2 COLLABORATION

Duration: approximate 2 years.

Focus: development and testing of solutions, often on a limited scale.

Grant: MSEK 10 maximum.

Grant as a proportion of total project costs:
50 percent maximum.

3

STAGE 3 IMPLEMENTATION

Duration: 2 years.

Focus: full-scale testing and implementation.

Grant: MSEK 5-20 approximate.

Grant as a proportion of total project costs:
25-40 percent approximate.

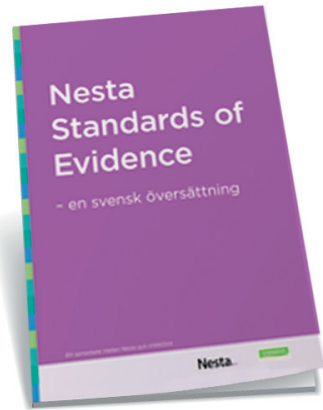
Requirements and support

The programme's demands of greenlighted projects are stringent since they must:

- be based upon the key needs of society and industry,
- result in innovations which combine international business potential with benefit to the community.

Standards are high and projects greenlighted under the Challenge-driven Innovation programme are often complex. Thus, to support these projects, Vinnova runs various activities, such as workshops where the projects can swap experiences and benefit from practical hints and methods, leadership development initiatives and so on.

Vinnova also recognises the need to support projects in regard to evidence and measuring impacts. In other words, how projects can bring reliable evidence of the ways in which they benefit society and business. This is a work in progress and Vinnova's first step has been to translate British innovation charity Nesta's publication *Standards of Evidence*. This publication is available on the Vinnova website.





Where can we find further information?
www.vinnova.se/cdi

Applying

When should we apply?

Calls close on the last Thursday of January and August each year. For more info, see: www.vinnova.se/cdi.

Who can apply?

Groups of at least three project partners can apply for Stage 1 funding – Initiation. Projects that receive funding at Stage 1 may proceed and apply for the next stage of the programme.

How are applications assessed?

Each stage is assessed confidentially by teams consisting of Vinnova officers and external assessors.

Pre-application support

The programme website offers various forms of pre-application support, such as a description of the programme, call texts for the three stages and presentations and films from information sessions.

Suggested reading

For inspiration, the programme website also has project files on greenlighted projects (available in Swedish only). Four examples of such projects can be found on pages 8-11 of this folder.



C/O City



Secure a sustainable eco system in concentrated cities (urbanization)



Ecosystem services for a sustainable city planning to benefit the citizens' wellbeing and which fulfil the city's demand for clean water, clean air and reduced environmental influences



Municipalities, architects, building developers, academia, non-profit organizations and consultants

CHALLENGE

**Sustainable
Attractive Cities**

STAGE



VATTEN & VÄXTER
REDUCERAR & REGLERAR
TEMPERATUREN
I STADEN



GRÖNOMRÅDEN
ÖKAR OMGIVANDE
FASTIGHETSVÄRDEN



VÄXTLIGHET
MINSKAR STRESS
& ÖKAR
VÄLMAENDE

LÖVERK
MINSKAR
BULLER

GRÖNA TAK & VÄGGAR
SKYDDAR MOT
UV-STRÅLNING



VÄXTLIGHET
GER OSS FÄRRE
ÖVERSVÄMNINGAR

SAMT VÄRMER & SVALKAR
BYGGNADER

DigInclude – Digital inclusion in the connected society for groups with special needs



Effective citizen services, via personally adapted tools, for elderly, immigrants and dyslectics



IT support that adapts and simplifies information flows



Academia, institute, municipality, county council, authority and companies (ICT and natural language processing)

CHALLENGE

Information Society

STAGE



skede. Det kan
Behandling
En blindtarmsinflamm
opereras korta
rusten blind
d omedelb
tabehandl
risk för ko
man söka
om man har de v
akutmottagning.
Blindtarmsinfla
betrakta oklara
Man kan alltid
Vad är blindta
Mer informa
Det som hä
blindtarms
bihanget,
behandla
Blindtarm
centime
männis
Blindta
bihang
briste
Män
Män
No
Sv
ål
a

HAI-proactive – New workflows and IT-tools to combat healthcare-associated infections

CHALLENGE

Future
Healthcare

STAGE



8-10 percent of patients in hospitals in Sweden are affected by Healthcare-associated infections (HAI)



New work processes and IT tools that will identify patients at high risk of HAI, to be able to act preventive



Academia, hospitals, county councils and software companies

Business model innovation for closed-loop furniture flows



A large quantity of furniture is thrown away each year, which has a significant impact on the environment



A concept for product development, business models, logistics and information services that enables a circular economy



Academia, municipalities, county council, research institutes, Ecolabelling Sweden, furniture-maker, design bureau and architect office

CHALLENGE

Competitive
Industries

STAGE





Do you want to know more?
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