

A woman in a grey jacket and orange top stands on a dirt path in a forest, holding a tablet. A man in a blue jacket and yellow beanie kneels beside her, looking at a smartphone. The background is a vast forest under a cloudy sky.

BIO AND CIRCULAR FINLAND –  
FUNDING FOR CIRCULAR RENEWAL  
BIO AND CIRCULAR FINLAND - BUSINESS FINLAND 2022  
OUTI SUOMI



# BUSINESS FINLAND MISSION IS GROWTH, RENEWAL, AND SUCCESS

Promoting Innovation

Promoting Exports

Attracting investments and travelers

## Tools

- Research and innovation funding
- Internalization
- Networking and contacts
- Expertise and vision of our domestic and International networks (over 140 experts in 35 countries)
- Theme choices and programs



INTERNATIONAL  
GROWTH



BEST  
ECOSYSTEMS  
IN THE WORLD

# FINNISH BIO & CIRCULAR ECONOMY EXISTING BUSINESS ECOSYSTEMS

## SUSTAINABLE TEXTILES

Cellulose  
fibre production

Recycled textile  
ecosystem

Utilization of recycled  
textiles fibres in  
different end-user  
applications

## PACKAGING

Bio-based barriers

Traceability – digital  
elements

New business models –  
Package as a service

## PLASTICS

Bio plastics

Plastic recycling

Use of recycled plastics

## BIOBASED SOLUTIONS

Nanocellulose based  
biomedical solutions

Bio composites

Biofuels

Biochemicals  
Ligning based binders

Proteins

## CIRCULAR VALUE ADDED STREAMS

Towards zero-waste  
processes

Metals recycling

Batteries recycling

Carbon neutral  
production – minimizing  
CO<sub>2</sub>

Nutrient recycling

SYNTHETIC BIOLOGY

NEW BUSINESS MODELS &  
DIGITAL TRANSFORMATION








BUILDING & CONSTRUCTION

CLIMATE SMART BUSINESS



# ExpandFibre Ecosystem R&D&I focus points on the road towards the Vision 2030

## Straw and wood fibres as raw materials

 <b>Textiles</b>	 <b>Biocomposites</b>	 <b>Packaging</b>	 <b>Lignin products*</b>	 <b>Hemicellulose products*</b>	 <b>Sourcing &amp; fractionation of straw</b>	 <b>Other fibre products</b>
<ul style="list-style-type: none"> <li>• New, sustainable textile fibres for wearable textiles and nonwovens</li> <li>• Staple fibre analytics and performance testing</li> <li>• New staple fibre applications and post-treatment technologies</li> <li>• Recycling and traceability</li> <li>• Business models to speed up global market entries</li> </ul>	<ul style="list-style-type: none"> <li>• Raw material processing and converting</li> <li>• Material properties</li> <li>• Recycling and end-of-life</li> <li>• Biocomposites containing fibres and lignin</li> <li>• All-cellulose composites &amp; natural fibre polymer composites</li> <li>• Additive chemistry</li> </ul>	<ul style="list-style-type: none"> <li>• New pulp-based plastic-replacing packaging solutions</li> <li>• Tools and processes for designing sustainable packaging</li> <li>• Barriers and binders based on natural polymers</li> </ul>	<ul style="list-style-type: none"> <li>• Lignin fractionation for material applications</li> <li>• Lignin as functional ingredient for thermosetting resins as well as for thermoplastics and bio-composites</li> <li>• Lignin dispersants</li> <li>• Novel methods for lignin functionalization</li> </ul> <p>*) Especially for straw</p>	<ul style="list-style-type: none"> <li>• Hemicellulosic sugar refining and separation</li> <li>• Xylose, pentoses and furfural as industrial ingredients and platform chemicals</li> <li>• Polymeric hemicellulose as industrial ingredients and platform chemicals</li> </ul> <p>*) Especially for straw</p>	<ul style="list-style-type: none"> <li>• Sustainable agricultural residue supply chains</li> <li>• Concepts for low-emission straw supply networks</li> <li>• Novel biomass supply contract concepts</li> <li>• New fractionation technologies for processing of agro-residual raw materials</li> <li>• Side-stream utilization in animal feed and fertilizer applications</li> </ul>	<ul style="list-style-type: none"> <li>• New materials based on pulp fibres for high-volume applications</li> <li>• Novel chemistry for pulp fibre modification</li> <li>• Functional structures including hybrid materials</li> <li>• Advanced 3D and 4D fibre processing methods</li> <li>• Fibre and specialty cellulose products from straw pulp, including MFC, MCC and chemically modified cellulose</li> </ul>
<p><b>Cross-cutting topics</b></p> <ul style="list-style-type: none"> <li>• Replacing plastics and fossil-based materials</li> <li>• Digitalisation &amp; measuring</li> <li>• Emerging technologies</li> <li>• Sustainability assessment</li> <li>• Design for circularity</li> <li>• Piloting and test-beds for new applications</li> <li>• Following regulatory environment</li> </ul>						

## Vision for 2030

- Investments in commercial production of new bioproducts (textile fibres, biocomposites, other bioproducts, etc.)
- New bioproducts available to the markets with significantly **lower carbon footprint**
- Sales and/or out-licensing of **new technologies** related to new bioproducts
- **Professionals** trained for new bioproduct businesses
- **Sustainability awareness** increased throughout the value chains

The background features a dynamic, abstract graphic composed of thick, wavy, layered bands in various shades of blue and white. The bands flow from the top right towards the bottom left, creating a sense of movement and depth. The lighting is soft, highlighting the curves and giving the graphic a three-dimensional appearance.

# **MARKET POTENTIAL DEFINING THE DIRECTION OF THE RENEWAL**

**BUSINESS  
FINLAND**



# ADVICE

Experts in Finland and around the world support Business Finland's customers at all stages of their growth and international expansion

- Selection of an external consultant
- Plan for growth and international expansion
- Market selection and validation
- Localization of the product selection
- Strategy and plan for market entry
- Market insight: contract and negotiation practices, market- and industry-specific tacit knowledge
- Problem solving: statutory matters, network of distributors

<https://www.marketopportunities.fi/home?page=1>



An abstract graphic featuring several overlapping, wavy, ribbon-like shapes in various shades of blue and white. The shapes flow from the top right towards the bottom left, creating a sense of movement and depth. The background is a light, pale blue.

# **FUNDING ENABLES THE RENEWAL**

**BUSINESS  
FINLAND**

# INNOVATION VOUCHER (1/2)

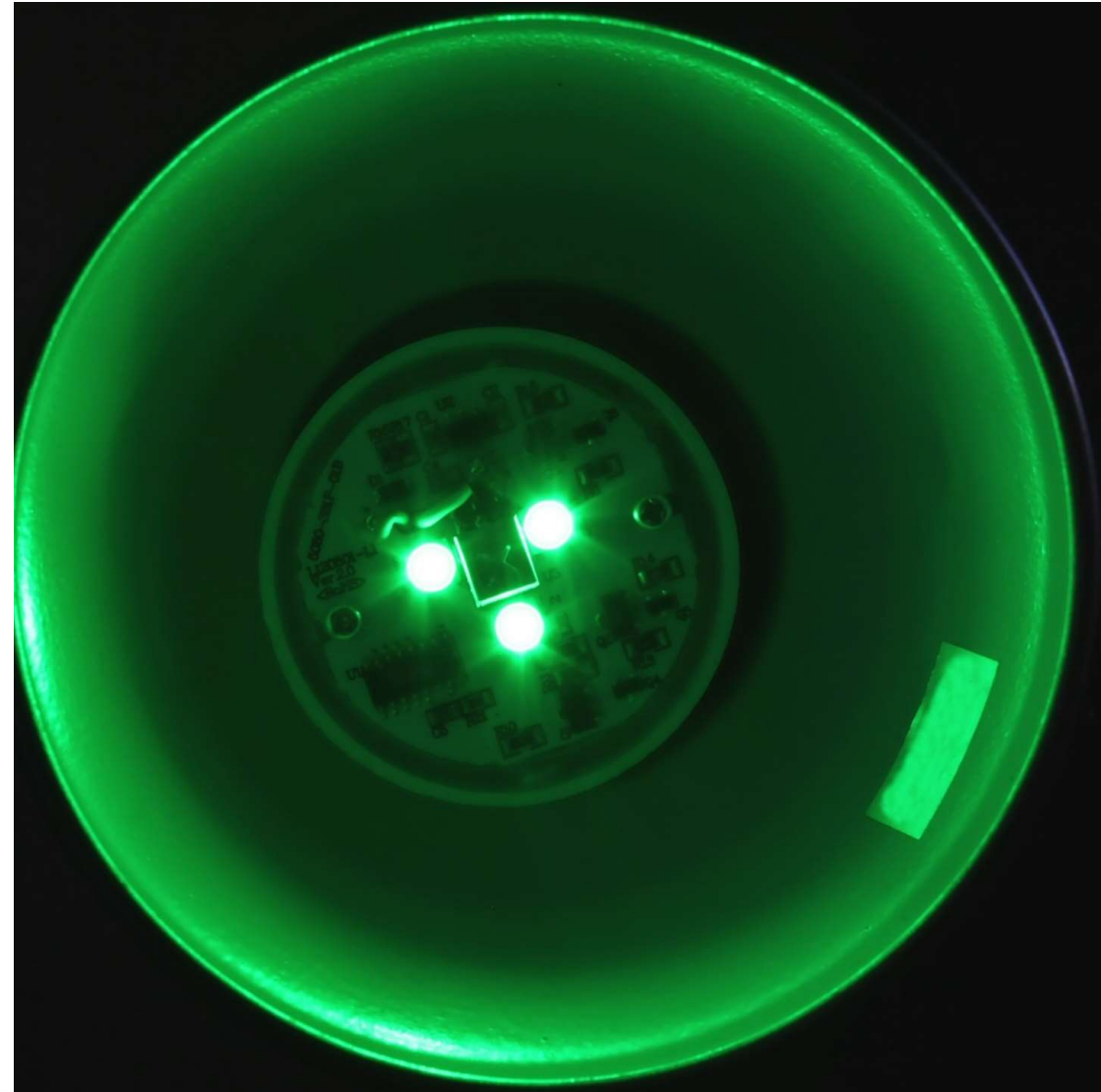
Purchase innovation expertise for your company

## WHO CAN APPLY?

SMEs and microenterprises that:

- Have a new product or service idea with international growth potential
- Are starting innovation operations
- Have at least one person who has worked full-time for a minimum of three months before applying for an innovation voucher

[WWW.BUSINESSFINLAND.FI/INNOVAATIOSETELI](http://WWW.BUSINESSFINLAND.FI/INNOVAATIOSETELI)





# INNOVATION VOUCHER (2/2)

## FOR WHAT PURPOSE?

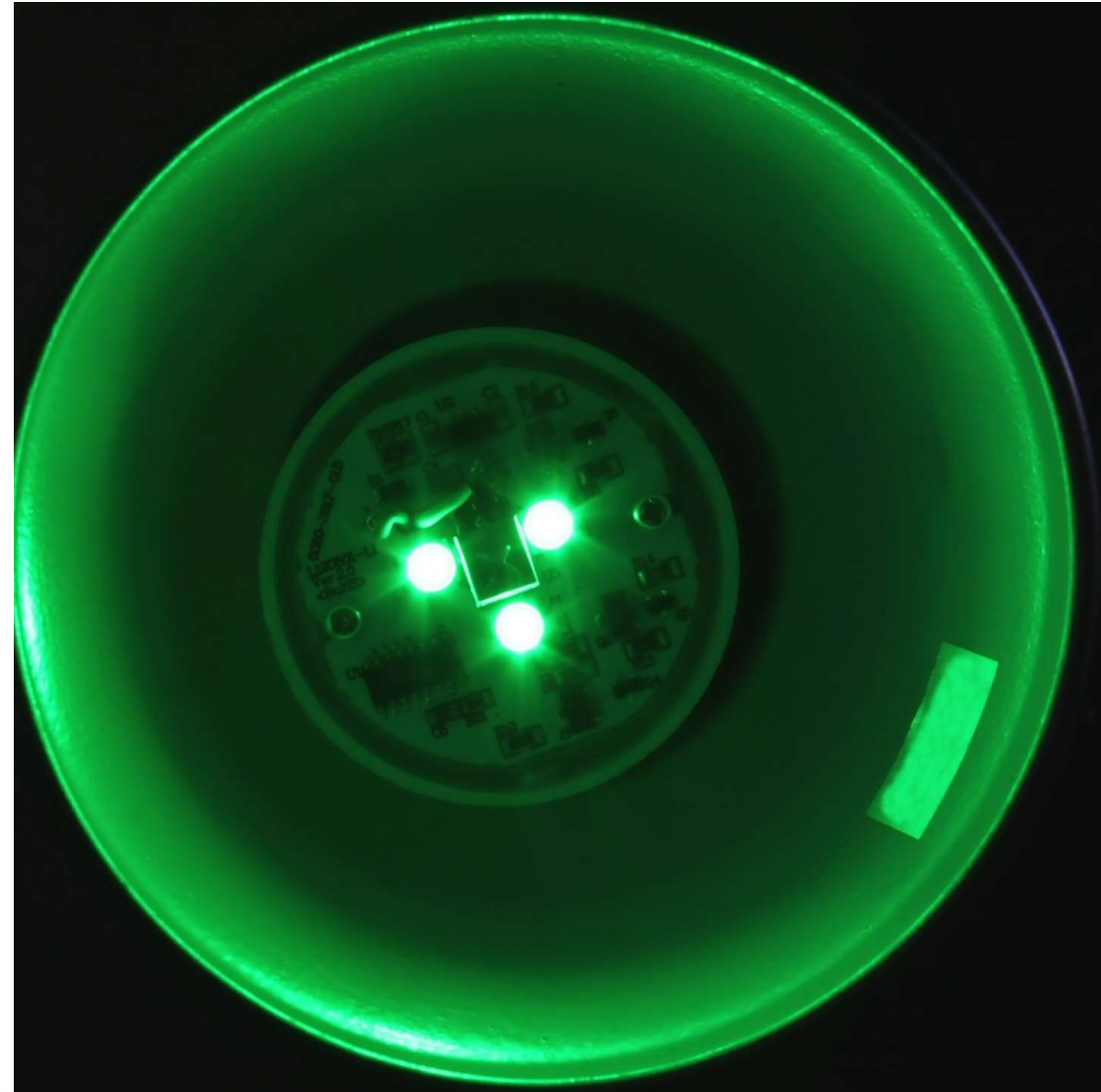
- Test, study and prepare a new product or service idea with international growth potential
- Competitiveness through copyright, trademarks, patents and business secrets
- Strategic thinking for brand building, design and marketing

## FUNDING FROM BUSINESS FINLAND

EUR 4,000 +  
VAT

EUR 1,000 +  
VAT self-  
financing  
contribution

De minimis aid



# TEMPO

Funding for start-ups, SMEs and mid-cap companies for international growth.

- Test your concept
- Get feedback from customers
- Ensure demand
- Know the market
- Develop your company's management, ways of working and organization

75% of the  
project costs

Maximum  
funding from  
BF:  
EUR 50,000

De minimis aid

▶ [WWW.BUSINESSFINLAND.FI/TEMPO](http://WWW.BUSINESSFINLAND.FI/TEMPO)





# CO-CREATION (1/2)

Funding for the development of joint research ideas of research organizations and companies

- The research organization determines the research problem and the path to its resolution, processes the project plan to attract companies and builds a new business and partnership network.
- The goal is to implement a joint co-innovation action in close cooperation between the research organization and its new business partners.

▶ [WWW.BUSINESSFINLAND.FI/EN/COCREATION](http://WWW.BUSINESSFINLAND.FI/EN/COCREATION)



# CO-CREATION (2/2)

## FUNDING FROM BUSINESS FINLAND

60% of the  
project costs

Project  
duration  
4–6 months

Project size up  
to  
EUR 100,000

- Continuous application
- The project cannot only consist of research-related costs. It must also include work to assess the feasibility of the idea, such as equipment costs or customer or market studies carried out for companies.
- Eligible costs:
  - Salaries
  - Indirect personnel costs 50%
  - Indirect costs (overheads) 20%
  - Travel expenses
  - Costs of materials and supplies
  - Purchased services necessary for the implementation of the project





# Funding call for industrial projects related to low-carbon circular economy, digitalization, and service exports

## For whom?

- To companies registered in Finland that pursue growth and internationalization and have sufficient financial resources, versatile expertise and a team for it. Research organizations may apply for this funding as part of a [Co-innovation](#) project.
- Example projects:
  - the development of industrial low-carbon services and service business models, such as products as a service (PaaS)
  - the utilization of industrial digital renewal and data economy in areas such as low-carbon value chains
  - the development of an industrial hydrogen ecosystem that uses renewable energy, in which hydrogen is recycled both as energy and as building material for end products (e.g., chemicals, new proteins)
  - the capture, storage, and re-use of carbon dioxide produced in industrial processes.

### Theme

Industrial projects related to low-carbon circular economy, digitalization, and service exports

### Schedule

Funding call opens 21.1.2022 - 30.6.2022

### Contact persons

Maarit Kokko, Sakari Karppinen

## What?

- According to the preliminary plan, a total of EUR 4 million of funding will be granted in 2022 and 2023. Business Finland will make funding decisions following normal selection criteria.

Applications must be submitted by 30 June, 2022 for funding granted in 2022. For funding granted in 2023, the call will open in late 2022.

# Kasvuyritysten innovaatiotuki

- Hiilineutraaliin yhteiskuntaan siirtyminen edellyttää valtavaa muutosta.
- **Vanhat keinot eivät riitä.** Innovatiivisten, kestäväää kehitystä edistävien ratkaisujen syntymiseen **tarvitaan vahva ja ajantasainen tietoperusta, uuden tiedon luomista ja haastavia kehitysprojekteja.**
- Projektit voivat liittyä esimerkiksi energiatehokkuuteen, ilmasto- ja ympäristöratkaisuihin, ilmastonmuutokseen sopeutumiseen, uusiin energiaratkaisuihin tai kiertotalouteen.
- **Tartu uusiin liiketoimintamahdollisuuksiin ja lähde etsimään innovatiivisia ratkaisuja yrityksesi menestykseksi.**





# Kasvuyritysten innovaatiotuki

## Kenelle?

- Startup, pk- ja midcap-**yrityksille, joilla on kykyä ja halua kasvaa kansainvälisillä markkinoilla.
- Tulevaisuuden ratkaisujen kehittäjille.
- Kaikkien alojen yrityksille**, jotka kehittävät kestäväää kehitystä edistäviä ratkaisuja.
  - Projektit voivat liittyä esimerkiksi energiatehokkuuteen, ilmasto- ja ympäristöratkaisuihin, ilmastonmuutokseen sopeutumiseen, uusiin energiaratkaisuihin tai kiertotalouteen.
- Avustusta kohdistetaan **yritysten itsenäisiin tutkimusprojekteihin**. Halutessaan yritys voi liittää projektinsa mukaan veturiyritysten tiekarttojen [mukaisiin kehitysalueisiin](#). [Lue tarkemmin kumppanuushausta.](#)

## RRF TEEMA:

Kasvuyritysten innovaatiotuki vihreään siirtymään

## AIKATAULU:

23.8.2021 - 31.10.2022. Hankkeiden tulee päättyä 2025.

2022 myönnettävän rahoituksen osalta hakemus kannattaa jättää viimeistään 31.10.2022.

**TAUSTAMATERIAALIT:** <https://www.businessfinland.fi/kampanjasivut/suomen-kestavan-kasvun-ohjelma>

## Mitä?

- Business Finland rahoittaa yritysten innovatiivisia tutkimus- ja kehitysprojekteja
- Uutta luovaa tutkimuksellista työtä rahoitetaan avustuksella.**
- PK-yrityksille enintään 50 prosenttia ja Midcap-yrityksille enintään 40 prosenttia projektin kokonaiskustannuksista.
- Rahoitusta saavat yritykset valitaan avoimin ja läpinäkyvin kriteerein jatkuvalla haulla.
- Fossiilisten polttoaineiden käyttöä edistäviä hankkeita ei rahoiteta.** EU:n päästökauppajärjestelmän (ETS) piirissä olevien hankkeiden osalta arvioitujen kasvihuonekaasujen päästöjen on alitettava vertailuarvo, joka on määritetty ilmaisjaon ehdoksi komission sovellutussäännöissä (EU) 2021/447.

- Funding call for industrial projects related to low-carbon circular economy, digitalization, and service exports (RRF) - Maarit Kokko and Sakari Karppinen
- Kasvuyritysten innovaatiotuki (RRF), vihreä siirtymä - Jani Lehikoinen, Liina-Lotta Latvala

[firstname.lastname@businessfinland.fi](mailto:firstname.lastname@businessfinland.fi)





# THANK YOU!

OUTI SUOMI - HEAD OF BIO AND CIRCULAR PROGRAM

<https://www.businessfinland.fi/suomalaisille-asiakkaille/palvelut/ohjelmat/bio-and-circular-finland>

