

Nordic Built Expression of Interest

Nordic Innovation / Jun 1, 2013 11:55 AM



Introduction

Welcome to the application Portal for Nordic Built Funding.

The easy application you submit here is designed for your convenience and to minimize the time you have to spend on administration.

All requirements and evaluation criteria are described in the call text, so please read it carefully before you fill in the application form. <http://www.nordicinnovation.org/nordicbuilt/funding>

Help texts for each text field is available by clicking the question mark icons next to the text fields throughout this application form.

Your application will be evaluated with weight on the following:

General 35%
Sustainability 15 %
New value/innovation 15%
Commercial 15 %
Added Nordic value 10%
Team composition 10%

Good luck!

Themes and project types

Summarize the theme of your project in 500 characters: This project targets innovation of the analysis and the design processes for renovation of the existing Nordic building stock. The main aims are:
1) To develop generalizable design methods and solutions for renovation combining energy efficiency, environmental design and lifecycle thinking
2) To create a Nordic research and innovation platform for renovation and transformation in architecture
3) To create innovative ICT services for performance modeling and resource management for renovation

Applicant/participants

Organization/Company:	Technical University of Denmark - DTU Civil Engineering
Full name:	Peter Andreas Sattrup
Postal address:	Brovej 1 Bygning 118
Zip code and city:	2800 Kongens Lyngby
Country:	Denmark
Phone:	+45 4525 1757
E-mail:	pans@byg.dtu.dk
Web address:	www.byg.dtu.dk
Role in project:	project leader, Associate Professor Building information modelling and Design Methods

Applicant/participants - 2

Organization/Company:	Technical University of Denmark - DTU Civil Engineering
Full name:	Toke Rammer Nielsen
Postal address:	Brovej 1 Bygning 118
Zip code and city:	2800 Kongens Lyngby
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Phone:	+45 45251682

E-mail:	trn@byg.dtu.dk
Web address:	www.byg.dtu.dk
Role in project:	Associate professor, integrated design methods, energy modelling

Applicant/participants - 3

Organization/Company:	Technical University of Denmark - DTU Civil Engineering
Full name:	Carsten Rode
Postal address:	Brovej 1 Bygning 118
Zip code and city:	2800 Kongens Lyngby
Country:	Denmark
Phone:	+45 45251950
E-mail:	car@byg.dtu.dk
Web address:	www.byg.dtu.dk
Role in project:	Professor, building physics, sustainable renovation

Applicant/participants - 4

Organization/Company:	Technical University of Denmark - DTU Management
Full name:	Morten Birkved
Postal address:	Produktionstorvet Building 426
Zip code and city:	2800 Kongens Lyngby
Country:	Denmark
Phone:	+45 45254669
E-mail:	birk@dtu.dk
Web address:	www.man.dtu.dk/
Role in project:	Associate Professor, quantitative sustainability assessment, Life Cycle Analysis

Project Partners

Organization/company:	Royal Danish Academy of Fine Arts School of Architecture
Full name:	Anne Beim
Country:	Denmark
Role in project:	Professor, building technology

Project Partners - 2

Organization/company:	Royal Danish Academy of Fine Arts School of Architecture/ JJW Arkitekter
Full name:	Jan Schipull Kauschen
Country:	Denmark
Role in project:	PhD candidate, sustainable system deliveries for renovation

Project Partners - 3

Organization/company:	JJW Arkitekter
Full name:	Ole Hornbek
Country:	Denmark
Role in project:	Partner, architectural design Office

Project Partners - 4

Organization/company:	JJW Arkitekter
Full name:	Charlotte Algreen
Country:	Denmark
Role in project:	Sustainability Manager, architectural design Office

Project Partners - 5

Organization/company:	Chalmers University of Technology/ White Arkitekter
Full name:	Fredrik Nilsson
Country:	Sweden
Role in project:	Professor, Architectural Theory, Transdisciplinarity expert, Director of research and development - White Arkitekter

Project Partners - 6

Organization/company:	White Arkitekter
Full name:	Paula Femenias
Country:	Sweden
Role in project:	Associate Professor, energy efficiency, renovation

Project Partners - 7

Organization/company:	Norwegian University of Science and Technology
Full name:	Arild Gustavsen
Country:	Norway
Role in project:	Professor, Zero Energy Buildings

Project Partners - 8

Organization/company:	Norwegian University of Science and Technology
Full name:	Aoife Wiberg
Country:	Norway
Role in project:	Associate Professor, Zero Emission Built Environment

Project Partners - 9

Organization/company:	Norwegian University of Science and Technology
Full name:	Bendik Manum
Country:	Norway
Role in project:	Associate Professor, architectural design

Project Partners - 10

Organization/company:	Helen & Hard
Full name:	Siv Helene Stangeland
Country:	Norway
Role in project:	partner, architectural design Office

Project Partners - 11

Organization/company:	Helen & Hard
Full name:	Reinhard Kropf
Country:	Norway
Role in project:	partner, architectural design Office

Project Partners - 12

Organization/company:	Novitas Innovation
Full name:	Tanja Bisgaard
Country:	Denmark
Role in project:	Partner, Green Business Innovation & marketing specialist

Project Partners - 13

Organization/company:	Lassila Hirvilammi
Full name:	Teemu Hirvilammi
Country:	Finland
Role in project:	partner, architectural design Office

Project Partners - 14

Organization/company:	Lassila Hirvilammi
Full name:	Anssi Lassila
Country:	Finland
Role in project:	partner, architectural design Office

Project Partners - 15

Organization/company:	Studio Granda
Full name:	Steve Christer
Country:	Iceland
Role in project:	Partner, Architectural Design Office

Project Partners - 16

Organization/company:	Studio Granda
Full name:	Margret Hardardottir
Country:	Iceland
Role in project:	Partner, Architectural design Office

Project Partners - 17

Organization/company:	Chalmers University of Technology
Full name:	Liane Tuvander
Country:	Sweden
Role in project:	Associate Professor, Modeling, Energy, GIS

Project Partners - 18

Organization/company:	White Arkitekter
Full name:	Marja Lindgren
Country:	Sweden
Role in project:	partner, PhD candidate, digital design, architectural design office

Project Partners - 19

Organization/company:	White Arkitekter
Full name:	Jonas Runberger
Country:	Sweden

Role in project:	Director of Research, PhD, digital design, Architectural Design Office
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Project Partners - 20

Organization/company:	Technical University of Denmark
Full name:	Henrik Almegaard
Country:	Denmark
Role in project:	Associate Professor, Construction, Sustainable Design

Project Information

Project Title:	STED - Sustainable Transformation & Environmental Design - Innovation in Design Methods for Sustainable Transformation of the Existing Nordic Building Stock: Energy, Environmental Design and Lifecycle Thinking
Start:	01.01.2014
End:	31.12.2016

General description

Describe the project in general:	<p>One of the most obvious questions today is how to improve the quality of the built environment to accommodate the changing needs of populations while dramatically improving resource efficiency? Solutions need to be energy efficient, durable and affordable in a lifecycle perspective and offer value socially, economically and environmentally. Renovating buildings beyond mere technical upgrades offer opportunities to create innovative design solutions which are not only energy efficient but have positive impacts on local environments, communities and experienced quality of life. Speeding up the processes of innovation and research in renovation reduces risk of implementing failing solutions.</p> <p>This project seeks to generate a new research and innovation platform for universities, architects and engineers in the Nordic Countries collaborating with experts in economics and management, - building on established research and practice competencies within the fields of sustainable renovation, energy, environmental design, lifecycle assessment, urban metabolism, trans-disciplinarity, digital modeling and fabrication. The partners in this innovation project will all contribute specialist competencies as well as renovation building projects that will serve as cases for innovation of design methods and solutions for renovation of the Nordic built environment. The research dimension in this project will ensure that solutions are generalizable and made available outside the partner group of the project. A pilot case resulted in awards for two proposals submitted to the recent Nordic Built Challenge design competition. The Jury recommended their research contribution to design methods and suggested it should be further implemented in innovative design solutions. It is a critical goal of the project to do so, now in collaboration with Nordic partners.</p> <p>The project addresses three major challenges: Sustainable Transformation of Existing Buildings: Architectural design holds the key to increasing building performance dramatically. More than that, renovation projects offers a chance to improve the quality of the built environment on many more parameters than just energy efficiency: Architectural design may improve wellbeing,</p>
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welfare, health, social cohesion, security and economic value too.

Knowledge Management and Innovation in Architecture
Architecture, engineering, social sciences and economy competencies need to be integrated in the earliest stages of renovation processes to achieve the best possible results, yet knowledge management for innovation is rarely used in a systematic manner among architectural practices and external partners.

Design Processes and Design Methods using ICT for Decision Support

Design processes for renovation are under intense pressure of time and economy, while solutions have long lasting impacts. ICT offer essential tools for resource management, performance modeling and decision support, but services need to be developed.

How does it create added Nordic Value?

By targeting innovative generalizable design methods and solutions for the Nordic countries, knowledge and know-how is created, which may offer better living conditions in the built projects that are likely to result from the collaboration, better economy and competitive advantages which are applicable outside the region and outside the partner group too.

By creating a Nordic Research and Innovation platform in architecture, it is the aim to accelerate knowledge creation through rapid and fertile exchanges between research and practice for the built environment.

By adding Information and Communication Technology (ICT) competencies for analytical modeling across borders, it is likely that methods may be improved rapidly, which may again result in competitive advantages to businesses as well as improving the research and education foundation in participating countries.

How does the project promote sustainability?

The purpose of architecture is to create better living conditions. When architecture is understood as a social and spatial 'technology' of environmental design which manages resources in a life-cycle perspective, - architecture is a major controlling factor in social, environmental and economic sustainable development. Successful design solutions are created by teams of architects, engineers and other specialists in collaboration with users, inhabitants and clients, and offer considerable value to the surrounding society.

In this project the overall quality of the built environment is the main issue, and new ways of supporting design decisions through knowledge management and innovations in design methods, solutions and the use of ICT for performance assessment and decision support serve this higher purpose.

Apart from resulting in concrete, realized projects over the three year period this project seeks to strengthen Nordic design culture through collaboration and example.

How does it create new value/innovation?

The project creates value and innovation in several ways:

- By creating a catalogue of generalizable architectural concepts and design solutions
- By creating new explicit methods for sustainable design which may be applied in practice and taught in universities.
- By speeding up knowledge creation through partnership and trans-disciplinary collaboration across borders.
- By (most likely) being able to build demonstration projects contributed by the partnering offices within the project period.
- By advancing the use of ICT for decision support, giving competitive edge to practice, research and education.

- By creating a proper design methodology for full integration of energy, environmental design and life cycle thinking in architectural design, which will be an important original research contribution, and offer new dimensions to sustainability in architectural concepts.

What is the commercial potential of the project?

Depending on how the targeted innovations are marketed by the participating business partners and institutions, the commercial benefits may have different potentials: Adding life cycle thinking to architectural concepts, may offer long term value to users and owners such as extended life cycles, adaptability, durability and upcycling potential of materials and constructions. The values created through better built environments may be both social and economic. Participating businesses and universities can develop new specialist competencies in design methods, solutions and ICT use, which can be capitalized as new specialist services in the Nordic countries and elsewhere. Drawing on innovation in management and economics, new models of financing the realization of design proposals are also to be envisaged.

Total budget

Preliminary total budget:	20 mio NOK
Applied amount:	10 mio NOK
Self financing:	50%

Which partner accounts for what amount of the applied sum?

Partner:	Technical University of Denmark (DK)
Amount:	2,7 mio NOK

Which partner accounts for what amount of the applied sum? - 2

Partner:	Royal Danish Academy of Fine Arts School of Architecture (DK)
Divider	
Amount:	0,6 mio NOK

Which partner accounts for what amount of the applied sum? - 3

Partner:	Chalmers University of Technology (SE)
Divider	
Amount:	1,2 mio NOK

Which partner accounts for what amount of the applied sum? - 4

Partner:	Norwegian University of Science and Technology (NO)
Divider	
Amount:	1,2 mio NOK

Which partner accounts for what amount of the applied sum? - 5

Partner:	JJW Arkitekter (DK)
Divider	
Amount:	1 mio NOK

Which partner accounts for what amount of the applied sum? - 6

Partner:	White Arkitekter (SE)
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Divider	
Amount:	1 mio NOK

Which partner accounts for what amount of the applied sum? - 7

Partner:	Helen & Hard Arkitekter (NO)
Divider	
Amount:	1 mio NOK

Which partner accounts for what amount of the applied sum? - 8

Partner:	Novitas Innovation (DK)
Divider	
Amount:	0,3 mio NOK

Which partner accounts for what amount of the applied sum? - 9

Partner:	Studio Granda (IS)
Divider	
Amount:	0,5 mio NOK

Which partner accounts for what amount of the applied sum? - 10

Partner:	Lassila Hirvilammi (SF)
Divider	
Amount:	0,5 mio NOK

Attachments

You have the possibility to upload a presentation of your Arkitekturpolitik er vækstpolitik_AB2_PAS2.pdf choice. Visual, graphic, flowchart etc. PDF only.
