

Pure competence in air.

# ENERGY EFFICIENT ZERAX<sup>®</sup> FANS CONTRIBUTE TO DGNB CERTIFICATION OF SUSTAINABLE BUILDINGS

Building & Industry

**NOVENCO** 

SCHAKO Group



# TAILOR MADE SUSTAINABLE BUILDINGS

**The DGNB provides an objective description and assessment of the sustainability of buildings and urban districts. The DGNB Certification System provides constructors and contractors with a tool for calculating how their decisions and choices of materials will have a bearing on the sustainability of the finished buildings. The assessments are always based on the entire life cycle of a building.**

## **GREEN QUALITY OF BUILDINGS**

Sustainability is one of the prevailing issues when it comes to growth, efficiency and future viability. Therefore cities and municipalities increasingly focus their strategies on sustainable development. In recent years, many constructors and contractors have chosen for their constructions to have a sustainable DGNB blue stamp. It makes the buildings more attractive to buyers, tenants and users, while sustainable constructions contribute considerably to the indoor and outdoor environments.

Founded in 2007 in Germany, the DGNB is a non-compulsory scheme to certify sustainable buildings and can be applied internationally. The independent building council for sustainable building in Denmark, Green Building Council Denmark, has chosen to follow the guidelines of the DGNB. In 2012 a Danish-adapted version was launched and since then, the number of certified buildings has increased steadily.

## **How NOVENCO Building & Industry contributes to DGNB Certification?**

NOVENCO's highly efficient and energy-saving products contribute positively to DGNB certification of buildings. In collaboration with Danish leading engineering, design and consultancy company, Rambøll, we have documented how our products can help constructors and contractors achieve more points in the DGNB Certification.

Rambøll has produced reports and associated documentation packages that make it easy for DGNB auditors to assess the specific contribution of our products to the various DGNB criteria.

## **CALCULATE ON DECISIONS**

The DGNB scheme gives the construction industry a common groundwork for sustainable building. The criteria in the scheme follows a fixed point score. In this way, it is possible to calculate how different decisions and choice of materials before and during the construction process impact on the final certification.

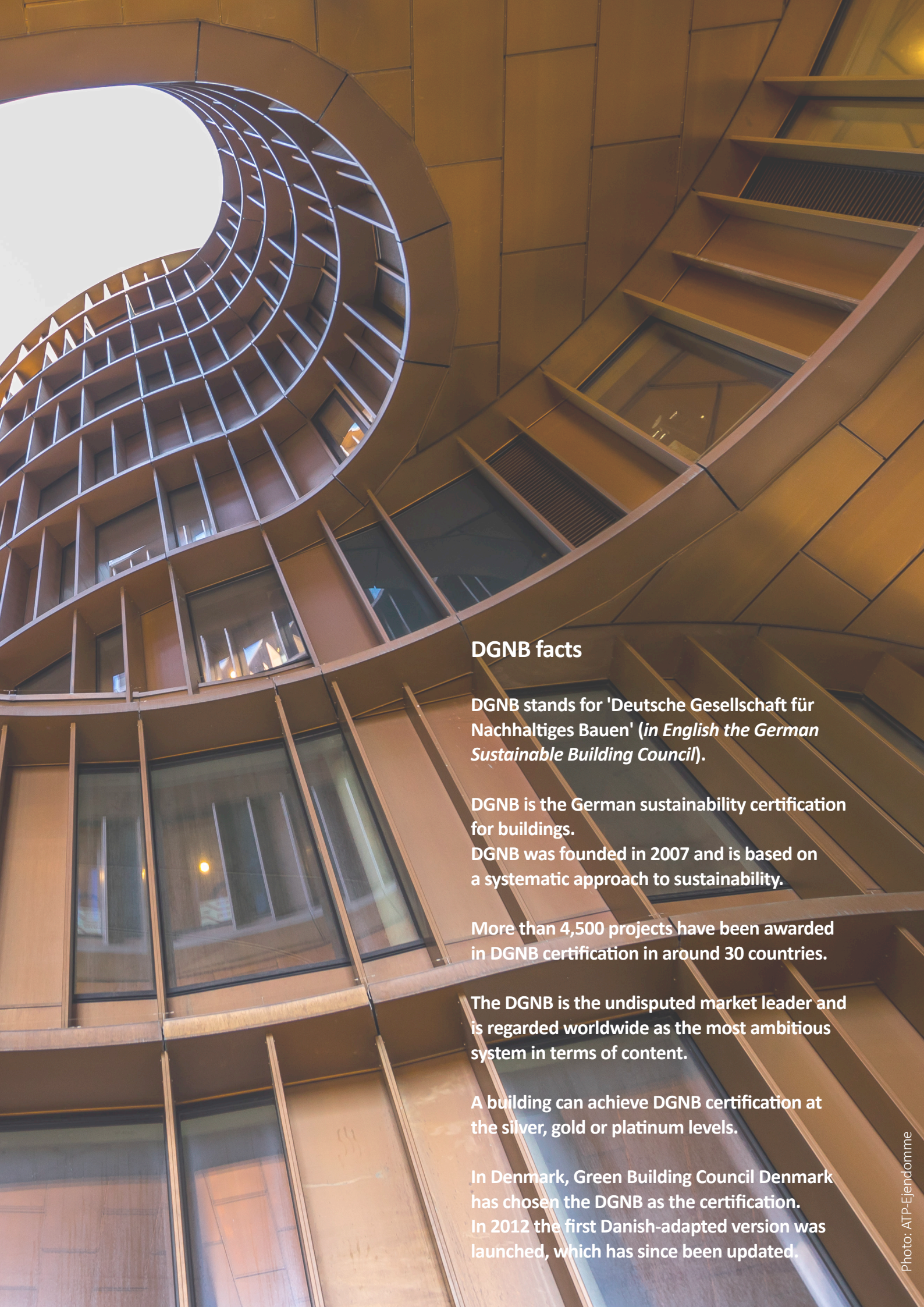
## **GLOBAL BENCHMARK FOR SUSTAINABILITY**

Due to its flexibility the DGNB Certification System can be tailored precisely to various uses of buildings and even to meet country-specific requirements. The DGNB Certification System covers all of the key aspects of sustainable building: environmental, economic, sociocultural and functional aspects, technology, processes and site. If a performance requirement is met, the DGNB awards the DGNB certificate in silver, gold or platinum.

## **Sustainable approach is of high importance**

In the 'Green Market Study' from 2019, Rambøll collected answers from almost 400 Nordic real estate and building experts. Over 90 percent of them consider sustainability necessary for a project to be successful.

In addition, the study shows that on average, sustainable buildings have 3-5 percent higher property and rental value, 5-10 percent lower operating costs and generally are more popular and willingly rented.



## DGNB facts

DGNB stands for 'Deutsche Gesellschaft für Nachhaltiges Bauen' (*in English the German Sustainable Building Council*).

DGNB is the German sustainability certification for buildings.

DGNB was founded in 2007 and is based on a systematic approach to sustainability.

More than 4,500 projects have been awarded in DGNB certification in around 30 countries.

The DGNB is the undisputed market leader and is regarded worldwide as the most ambitious system in terms of content.

A building can achieve DGNB certification at the silver, gold or platinum levels.

In Denmark, Green Building Council Denmark has chosen the DGNB as the certification. In 2012 the first Danish-adapted version was launched, which has since been updated.

# HOW NOVENCO CONTRIBUTES TO DGNB CERTIFICATION

**Rambøll has created a documentation package as a helpful tool when constructors, contractors or auditors need to assess NOVENCO Building & Industry's specific contribution to DGNB certification of buildings. The documentation has been created in relation to the Danish DGNB standards from 2016.**

The table on the next page shows the criteria to which NOVENCO Building & Industry's products contribute in the DGNB Certification of office and residential buildings, and how much each criteria counts in the certification. NOVENCO's products can have a positive impact on the points within the listed criteria, which may account for up to 39.1 % of the total certification.

## **GREEN IMPACT**

As a conclusion of the documentation package, NOVENCO's products - ZerAx® axial fans have the largest impact on the DGNB criteria within the environment, economy and technology. The ZerAx® fans have low impact on process criteria, whilst having no influence on the social criteria. This is due to the fact that these criteria are mainly project-specified, and thus are primarily dependent on the building design and the construction processes.

## **ENERGY IN FOCUS. NATURALLY.**

The ZerAx® fans have an additionally large impact on the energy consumption in the buildings.

The environmentally responsible EC+ concept with ZerAx® fans is the latest market response to growing demands for energy saving and the result of close cooperation between Danfoss and NOVENCO.

With overall efficiencies up to 85%, the EC+ solution is the most efficient, profitable and up-to-date available on the market. Conceived to increase efficiencies of HVAC systems, the EC+ concept offers to radically reduce use of energy in existing and new installations. Furthermore, the environmental impact is diminished and CO<sub>2</sub> emissions are significantly reduced.

All this makes the EC+ solutions strong and capable alternatives for maximisation of the energy efficiencies of ventilation systems for the benefit of operators and the environment.



Novenco provides a well-documented and easy to work with product in the implementation of DGNB certifications.

With all documentation for DGNB in one place, Novenco creates a very transparent product – the Novenco ZerAx axial flow fans. This is exactly what is needed to make informed design choices in the future.



*Christine Collin,  
Senior Sustainability Consultant at Rambøll*



## **Are you a DGNB auditor?**

**If you are a DGNB auditor on a specific project, you can receive Rambøll's detailed report and additional documentation package for NOVENCO's contribution to the building certification.**

**Contact us on [info@novenco-building.com](mailto:info@novenco-building.com) or +45 70 77 88 99**

# NOVENCO Building & Industry can contribute to one-third of DGNB certification points

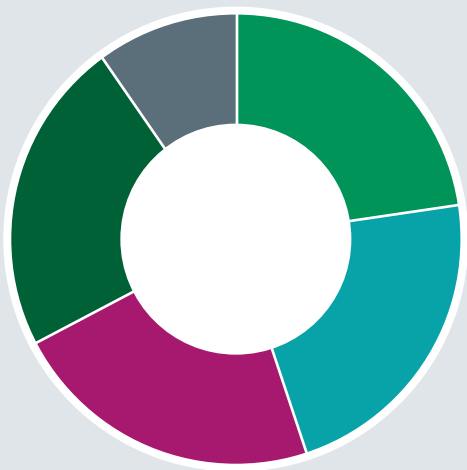
NOVENCO can have positive impact on all the criteria listed in the table below.

They may account for up to 39.1 % of DGNB certification.

It is not NOVENCO's products alone that ensure the 39.1% of the percentage points, but the percentages describe the criteria by which NOVENCO's products can contribute positively to the point allocation in a particular project.

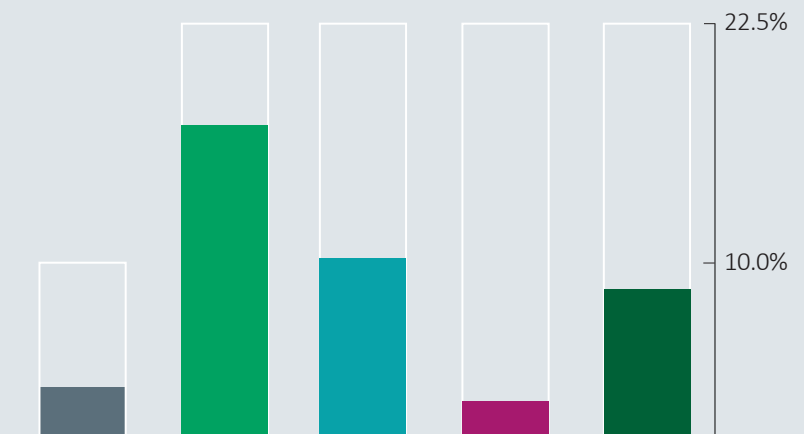
Process quality	PRO 1.5	Documentation for sustainable management	1.1%
	PRO 2.2	Quality assurance of the construction	1.7%
Environmental quality	ENV 1.1	Building life cycle assessment	7.9%
	ENV 1.2	Local environmental impact	3.4%
	ENV 2.1	Flexibility and adaptability	5.6%
Economic quality	ECO 1.1	Life cycle cost	9.6%
Social quality	SOC 1.5	User control	1.8%
Technical quality	TEC 1.2	Sound insulation	3.2%
	TEC 1.4	Use and integration of building technology	1.6%
	TEC 1.6	Ease of recovery and recycling	3.2%

**Total NOVENCO's possible contribution 39.1%**



**DGNB: criteria in percentages**

Process quality	10.0%
Environmental quality	22.5%
Economic quality	22.5%
Social quality	22.5%
Technical quality	22.5%



**DGNB: NOVENCO's possible contribution**

Process quality	2.8% of 10.0%
Environmental quality	16.9% of 22.5%
Economic quality	9.6% of 22.5%
Social quality	1.8% of 22.5%
Technical quality	8.0% of 22.5%

# GREEN AMBASSADORS OF SUSTAINABLE VENTILATION

Since 1947 our design, development and operation of ventilation products and systems has given us vast experience. The efforts we put into research and development reflect our dedication and allow us to create products on the technological forefront with respect to performance and durability. This is what we consider necessary to stay up front in a world that changes constantly with new environment requirements and calls for innovative solutions from customers and the business environment. The challenges fuel our desire to create the next generation of ventilation products.



With an efficiency of 92%

ZerAx® is a game changer

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

UN SDGs

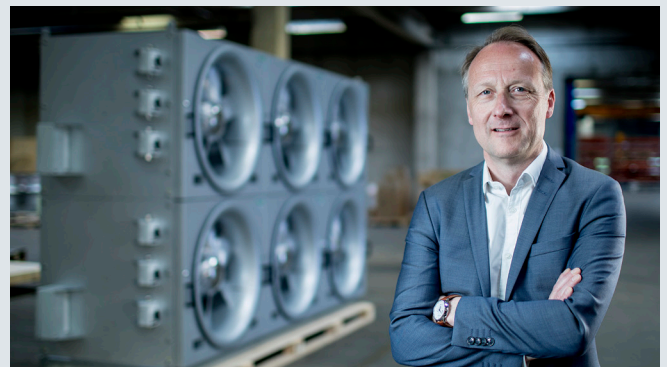
The greenest watt is the one that is not produced



We believe that the greenest watt is the one that is not produced. The world uses enormous amounts of energy to ventilate and cool. Imagine that you could replace your old fans with NOVENCO's ZerAx® fan, and thus save half of your power consumption. Compared to more conventional fans, ZerAx can save up to 50% through the retrofit of older fans, which has been proven in several retrofit projects around the world.



Lars Erik Knaack, CEO at NOVENCO Building & Industry



# ZERAX<sup>®</sup> - DESIGNED FOR LIFETIME

The engineering of the NOVENCO<sup>®</sup> ZerAx<sup>®</sup> fans is an unprecedented achievement in NOVENCO history. The ZerAx revolutionises the design and performance of axial flow fans and is in fact an energy-saver of the future that redefines and heralds a new generation of fans. The ZerAx is 98% recyclable, has unmatched fan efficiencies of 92% , low sound levels and product lifetimes of 20+ years. This makes it the best-in-class and ready to comply with future environmental legislation.



Fan efficiencies up to 92%



Energy savings of 20-50%



Lifetime of 20+ years



98% recyclable



Low sound levels



ROI's between 12-18 months



Zero maintenance



Sustainable production

Pure competence in air.

mu 15960 0320

Building & Industry

**NOVENCO** 

SCHAKO Group



[WWW.NOVENCO-BUILDING.COM](http://WWW.NOVENCO-BUILDING.COM)