

Institut Bauen und Umwelt e.V.

ECOLOGY

COMMUNITY

SUSTAINABILITY

CONSTRUCTION PRODUCTS

DECLARATION



**40 YEARS**

a strong community



Hans Peters, Chairman of the IBU

FROM THE VISION TO THE STANDARD

“The IBU is the most successful cooperation in the construction sector”

Construction and the environment go hand in hand; it is only through construction that the environment becomes a living space. This is associated with an expenditure of energy and resources. 40 years ago, making this transparent and assessable for the purpose of sustainable development, was the vision of a few responsibly-minded construction material manufacturers. Today this idea has become a self-image among the producers of construction products. Uniquely not only in Germany, but throughout the whole world, an industry unanimously decided to draw up sustainability-related information in a science-based normative process and to subject it to verification. The construction industry is thus the trailblazer of all industrial sectors.

A sustainability assessment of construction products is only possible within the context of the structure and against the background of its use and life cycle. Therefore, in addition to the life cycle assessment, system-relevant information such as the functional unit and environmentally relevant instructions for use are decisive for the market acceptance of environmental product declarations (EPD). The IBU members got together to publish these according to uniform rules.

Apart from the history of the IBU and an explanation of the creation of EPDs, we have also included several best practice examples of our members in our anniversary brochure, to show how naturally and positively the topic of sustainability has now hit home in the construction industry.

I wish you entertaining reading.

*Hans Peters*

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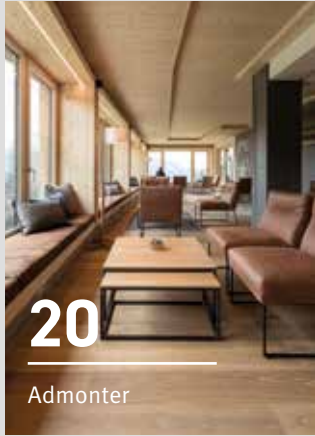
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# Transparency

as the decisive first step towards full development of the potential in sustainable building

” Sustainability has many facets: Environmental impacts and resource efficiency, health and safety effects, compliance with and implementation of social standards as well as dealing with criticism fairly, openly and constructively – all this belongs to sustainability, is what makes sustainability what it is. The provision of affordable living space is thus also an element of sustainable building. Even though the latter topic is particularly close to my heart, here I would like to draw attention to another topic.

Life cycle assessment, consideration of the entire life cycle of a product combined with uniform and scientifically sound standards, has established itself as the most important tool in the assessment of ecological sustainability. In the building, the environmental footprint of the selected materials is becoming increasingly important: While in buildings built pre-1970 the manufacture of the materials contributed only a minuscule portion of the greenhouse gas emissions and energy consumption measured over the entire life cycle, data of the German Sustainable Building Council (“Deutsche Gesellschaft für Nachhaltiges Bauen” - DGNB) suggests that the ratio of material to consumption is inverting. In present day buildings designed and built under sustainable aspects the share of energy supply is reducing continuously, so that if further progress is made the production of construction materials will dominate the life cycle assessment of the building in the foreseeable future.

Photo: Inga Haar/IBU



Dr Barbara Hendricks,  
President of the IBU

Against this background, Institut Bauen und Umwelt (IBU) and its members must be given great credit for foreseeing this development decades ago and for beginning to publish appropriate information on construction products. The environmental product declarations or EPDs, in whose development the IBU played a decisive role, are now the standard for the provision of transparent and credible data about the environmental impact of construction products.

This success should encourage us to tackle the work that lies ahead, until we can truly speak of comprehensively sustainable construction. The creation of transparency, for which IBU stands, was the decisive first step, but others must follow so that the construction materials sector can fully exhaust its potential with regard to sustainability. IBU’s data is available to the public for the design and optimisation of buildings and should be used even more. IBU also carried out important groundwork in this area with its digitalisation strategy, as well as with its tireless advertising for life cycle assessment, and its work continues.

In addition, it is also necessary to examine regularly whether the scope of information covered by the EPDs is still appropriate. With its new SuPIM (Sustainable Product Information Module) database, IBU supplements the classic EPD in several respects, yet it is perfectly feasible that more additional formats will have to be developed for dealing with resource efficiency or social responsibility.

Each producer of construction materials has the opportunity to optimise the environmental footprint of their products and processes over the entire life cycle on the basis of EPDs and life cycle assessments – and they should make use of this opportunity repeatedly.

One thing is already certain: There is still plenty to do. Not only in my function as President but also as a consumer, I would like to advise all member companies to use the IBU more as a platform for cross-industry exchange of experiences, in order to be heard as a strong voice in the discussions on the topic of sustainable building, because sustainability and climate protection concerns us all.

Barbara Hendricks





# 40 years

of the Institut Bauen und Umwelt (IBU) in Germany

Sustainability, environmental protection and transparency: This is what the “Institut Bauen und Umwelt” stands for. This year it celebrates its 40th birthday and can look back on a success story.

Unlimited growth is not possible on a planet with limited resources. This truth, formulated by the “Club of Rome” at the beginning of the 1970s in its famous report on the “Limits to Growth” is today more true than ever before. The report was the start of a topic shifting into the focus of society that until then had hardly attracted any attention: environmental protection. Nonetheless, it still took almost another decade before the environmental movement also found its way into the German parliament.

Sociopolitically, a decade of consumption and brand awareness begins with the 1980s. People start to define themselves much more through their lifestyle.

At the same time, 1980 is the year in which the political awakening of environmental awareness occurred. Led by Greenpeace and a newly formed “green movement”: “Ecological, directly democratic, social, non-violent” – peace, environmental and women’s rights activists met under this motto to found the “Die Grünen” (Green) party. In 1986, the Federal Ministry for Environment, Nature Conservation and Nuclear Safety (“Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit” - BMU) is founded.

As the predecessor of the Institute of Building and the Environment (“Institut Bauen und Umwelt” - IBU) was founded in 1980, very little pointed in this direction. Economically, the situation in 1980 was calm. Very few people anticipated that the so-called “second oil crisis” in the ensuing years would lead to the severest recession since the birth of the Federal Republic of Germany. In 1980, the unemployment rate was a moderate 3.8 percent. Three years later it would be over nine percent.

A significant consequence for the construction sector is that politicians passed the first energy saving legal requirements. In doing so, the legislator recognises that construction works are material and energy-intensive. This applies to their erection, but also to the ▶



1980

- Formation of the Arbeitsgemeinschaft Umweltverträgliches Bauprodukt (AUB) in Munich
- Start of the development of environmental certificates



2000

- Inclusion of life cycle assessments in the environmental certificates

2002

- Further development of the environmental certificates into environmental declarations (birth of the present-day EPDs)
- Foundation of the Advisory Board
- Move of the office from Munich to Königswinter

2005

- Publication of the first EPD (Rockwool)
- Prof Horst Bossenmayer is the new President



2006

- Official introduction of the environmental product declaration (EPD) at the AUB Congress in Stuttgart
- Start of a four-year roadshow

2008

- The AUB is renamed Institut Bauen und Umwelt (IBU)
- Official presentation of the IBU at an international congress for sustainable building (Consense)



**The entire construction material industry now uses the environmental product declarations developed by the IBU, when it comes to providing transparent and credible environmental and sustainability information on construction components and products.**

maintenance and energy expenditure over their period of use. The requirements affect an important branch of the economy: In housing construction around 389,000 housing units are completed in 1980, which remained roughly constant until the mid-1980s. By way of comparison: In 2016, the umbrella organisation of the German building sector for West and East Germany together counted only 228,000 completions and 304,000 building permits.

**From the simple data sheet to the complex life cycle assessment**

But in the same year 1980, a dozen construction material manufacturers demonstrate their foresight and found the Environmentally Compatible Construction Product Joint Venture (“Arbeitsgemeinschaft Umweltverträgliches Bauprodukt” - AUB). The objective of the initiative was to publish environmental criteria, jointly and on the basis of binding standards, which at the time already included the use, life, landfill disposal and recycling of the products. These manufacturer’s declarations were issued as a data sheet on environmental compatibility. Workgroups and an assessment committee formed to check the information. The environmental compatibility data sheets were thus an important first step towards more transparency. Yet criticism/reservations were also expressed, as the information was based on manufacturer’s declaration and there was not yet any scientific assessment at that time.

By the end of the 1990s, with the so-called life cycle assessment and its international standardisation, an instrument for the construction industry was then created for the first time, with which the essential environmentally relevant information could be recorded, calculated and compared scientifically. The first life cycle assessments were still extremely time-consuming, because in principle, each product had to be tracked “manually”. The first databases were then created, in which the generic environmental profiles of many products could be found. The next step was then to provide product-specific data in EPDs.

The AUB and its members very quickly recognised the opportunities resulting from the life cycle assessment: With the support of the German Environmental Agency and scientists such as Dr Eva Schmincke and Prof Dr-Ing Thomas Lützkendorf, the scientific findings were specified and made practicable for the construction industry. At the same time, the EU’s Construction Products Directive was harmonised. It now formulated so-called essential requirements which, among other things, concern hygiene, health and environmental protection as well as the sustainable use of resources.

**Further development through to the environmental product declaration**

The members of the AUB used these basic conditions to develop today’s German and international standard Environmental Product Declarations, or EPDs for

short, in their present day format. Unlike, for example, the “Blaue Engel” (“Blue Angel” ecolabel), they are not a rating label, but instead provide the data from which the respective life cycle balance of the building can be compiled from the life cycle balances of the individual construction products. And this is in turn acknowledged by certifications which reward (e.g. LEED) or even require (DGNB, BNB) the provision of EPDs or rather the calculation of life cycle assessments for building optimisation. Following extensive adjustments and analyses, in 2006 the first EPD in the present day format was issued to Rockwool.

The persons responsible in the AUB at the time used these developments to also redevelop its internal structure and public image. In 2008, the “Arbeitsgemeinschaft Umweltverträgliches Bauprodukt” (AUB) renamed itself the Institute of Building and the Environment (“Institut Bauen und Umwelt” - IBU). In 2013 it moved from Königswinter to Berlin. The long-standing President of the Deutsche Institut für Bautechnik, Professor Horst Bossenmayer, became the neutral and honorary President of the association in 2005.

**EU recognises the value of EPDs**

Alongside the growing demand due to certification systems such as the DGNB and the will of several pioneers to create transparency with regard to the environmental impacts of their products, the EU also acknowledged the potential

of the EPDs as a standard for details of the environmentally related information for construction products. In 2011, the EU worked on the corresponding amendment of the Construction Products Regulation. In this procedure the IBU was able to convince the European Commission that EPDs are the suitable tool for documenting environmentally related information. The reference to EPDs was included in the recitals of the Construction Products Regulation on the significant effects on the environment.

The office of the IBU knew how to use this reference, as an instrument recommended by the EU, as well as the obligatory CE marking resolutely: Over the years the society developed from one of a dozen pioneers into the largest association of manufacturers in the construction material industry.

The entire construction material industry now uses the environmental product declarations developed by the IBU, when it comes to providing transparent and credible environmental and sustainability information on construction components and products. The IBU sees itself as a cross-industry and independent institute.

“Our success was and is extraordinary”, the IBU Chairman Hans Peters is pleased to say. “Today more than 200 firms and associations are members of the IBU, which represents far more than 3,000 companies in total. More than 1,800 EPDs and over 300,000 downloads in 2019

clearly show the growing significance of the topic for sustainable building.”

**The future is digitalisation**

Five years ago the IBU began preparing information digitally under IBU.data, to make the sustainability-related data BIM-compatible. Building Information Modelling (BIM) is software based on 3D-modelling, which architects, engineers and contractors use to design and build. “With our IBU.data and SuPIM offer we are on a course fit for the future, for providing our sustainability data for many new solutions”, emphasised IBU’s Managing Director Dr Alexander Röder. With this digitalisation step it becomes possible for sustainability-related data to be one of the future daily tools of the trade of architects and engineers.

For this next development step, by acquiring the former Federal Minister for the Environment and Construction, Dr Barbara Hendricks, we were able to acquire a President who stands for independent, transparent and credible information.

She will be able to build on a very good foundations: The IBU played a significant role in making the terms sustainability and environmental protection omnipresent in today’s construction industry and thus allowing the construction industry to assume a vanguard role among all sectors of industry in Germany with regard to information about sustainability and the environment. ●

**2011**

- IBU reaches 500 direct and indirect members.
- In response to an IBU initiative, 27 organisations from 17 EU member states sign a memorandum for foundation of the ECO Platform.

**2012**

- Publication of the European standard EN 15804 
- Mutual recognition of TYPE III environmental declarations for construction products in Europe


**2013**

- IBU is the initiator and founding member of the ECO Platform.
- The EU Construction Products Regulation comes into force
- The IBU office moves to Berlin


**2017**

- Complete digitalisation of the IBU EPDs (IBU.data) 
- IBU becomes Europe’s largest federation of manufacturers in the construction materials industry.

**2019**

- Record: 303,569 EPD downloads in one year
- Dr Barbara Hendricks is the new President 

**2020**

- 18/12/2020 – 40 years IBU 



2008: Hans Peters, Chairman of the IBU and Prof Dr Horst Bossenmayer, IBU President at the time, are pleased about the renaming from the AUB to the IBU.

# From the AUB to the IBU

## a sustainable construction products success story

Scientific findings and political requirements are not implemented in industry automatically. This requires competent mediators such as the IBU. We discussed this with the Chairman Hans Peters and the long-standing IBU President, Prof Dr Horst Bossenmayer.

*The Arbeitsgemeinschaft umweltverträgliches Bauprodukt (AUB) was founded in 1980. How did you experience that time?*

**Prof Bossenmayer:** It was a time in which we still had to justify ourselves in taking environmental issues seriously. Take the example of thermal insulation: If someone used thermal insulation at that time it was because it was their hobby or because they wanted to live in a particularly environmentally friendly way. Very few considered it to be necessary.

**Peters:** The AUB was originally a coalition of different manufacturers, who defended themselves against the emerging “water diviners” of that time. At the beginning of the 1980s there was not yet any orientation towards the topic of sustainability. Instead, viewed from today’s perspective, there was a range of naive books in which many products were sweepingly called dangerous or toxic. There was not yet any differentiation

between the constituents processed in products and that which is emitted during use, for example, gas emissions. The objective of the AUB was therefore to objectify the discussions.

*How did you objectify the discussion back then?*

**Prof Bossenmayer:** The AUB concerned itself intensively with environmental requirements for construction products and created a range of certificates for “environmentally compatible construction products”. It was exemplary in Europe. At that time the European Commission also slowly began to concern itself with such aspects.

**Peters:** In 1982, the then association assumed specific traits, a managing director was appointed and the first publications were issued. Unlike today, they were initially only the firms’ own descriptions of the ecological assessment of their products. Experts provided advice and information, but it was not yet possible to quantify characteristics and have them validated externally. This was only made possible by the life cycle assessments at the change of the millenium.

*And why did the original organization develop further into the Institut Bauen und Umwelt?*

**Peters:** The AUB never managed to make the topic truly market-relevant for companies and therefore was increasingly diminished. At the end it actually only had ten firms left. However, the AUB was

exemplary, in fact almost visionary, in one point: At a very early stage it had recognised that the topic of environmental product declaration or life cycle assessments would be very important in the future. But it is not sufficient to merely have a good idea, you must also be able to “sell” it. This is why we developed different models from normative approaches, for what a life cycle assessment could look like for a company, for a group (consolidated companies) and for an association. And armed with this concept, I began an essentially perpetual acquisition tour for the IBU from 2002 to 2010.

*In addition you also performed on a political level...*

**Peters:** Correct. The decisive breakthrough for the IBU was that we were able to win over Professor Bossenmayer as the new President. As the President of the German Institute for Construction Technology (“Deutsches Institut für Bautechnik” - DIBt) he had made decisive efforts for the Europeanisation of standards and design codes and therefore had extensive contacts and a positive familiarity with politicians, authorities as well as industry and associations. As a result, the abstract handling of the topic of life cycle assessment and sustainability finally became a specific political concern.

**Prof Bossenmayer:** From 2000 I chaired the technical committee TC 250 of the European Committee for Standardisation (CEN) and was therefore able to experience up close which ideas the construction industry on the one hand and the ▶





**“We have now covered all areas with environmental product declarations that have everyday relevance for the construction industry.”**

*Prof. Dr. Horst Bossenmayer, former President of the IBU*

building administration on the other wanted to introduce in legislation. The TC 250 dealt with the creation of uniform European design codes for structures (the so-called Eurocodes) and in this context, also covered the harmonisation of corresponding standards for the construction products used in construction works.

The Eurocodes specified the basic stability and fire protection requirements for structures (according to Annex I of the present day regulation of the European Parliament and of the Council), but not the other basic requirements, for example, the present day basic requirement No. 7 “sustainable use of natural resources.”

**Peters:** However, we should not underestimate the very good work of the Federal Government’s commission of inquiry, through which topics such as energy and resource savings as well as sustainably were actually specified and made socially relevant for the first time. In the nineteen-nineties all this contributed to work starting on standardisations in this field of topics and by the end of the millenium, with the help of the German Environment Agency (Umweltbundesamt), this was actually specified.

*Was the cooperation with the Umweltbundesamt (UBA) and the development of the life cycle assessment like a game changer?*

**Prof Bossenmayer:** Yes, you are completely right. The cooperation with the UBA was essential, and we also knew how to get on well on a technical level.

**Peters:** Definitely! Energy and resource consumption became increasingly important, and thus the construction sector shifted into focus, because it was clear to everyone that construction does not take place in a void, but also has effects on the environment. In order to systemise the discussion, the industry decided that standards were the right way and therefore supported the life cycle assessment approach. The UBA provided research funds to develop the life cycle assessment concept. And at that time, the comparatively small IBU actually managed to have research applications approved by the UBA. Decisive thanks for this must also go to Dr Eva Schmincke, Professor Thomas Lützkendorf of the KIT in Karlsruhe and the present day Managing Director of the DGNB, Johannes Kreißig, at the time working for PE International.

*Life cycle assessments were and are the basis for environmental product declarations, so-called EPDs. Of these, there are currently around 1,300 stand-alone declarations plus around 500 translations into different languages. Yet there are far more different construction products. How large is the current coverage with EPDs, and are there areas that cannot be or are difficult to develop?*

**Prof Bossenmayer:** We have certainly now covered all areas with everyday relevance for the construction industry. The number mentioned only includes the EPDs in the narrower sense. However, products such as light fittings or garage doors, which are outside the actual structural requirements in the narrower sense, are also used in a building. If you add these, then you would certainly arrive at a number that is at least twice as large.

**Peters:** That’s true. All in all there are many, many more. Let’s take the relatively simple example of a building brick: At heart its EPD shows a dependency on the mass, which is largely linear across all product variations. This means you can now say that there is an EPD for an average brick. You can also say that a life cycle assessment can be easily derived from bricks for around 150 products. I would therefore rather answer your question by saying that at the moment up to 20,000 products can certainly draw on reliable life cycle assessments. And in addition, there is probably the same number again, of which scientists would say that the deviations are too large within the scope of the normative life cycle assessment.

*Nonetheless, as a layman, I would like to dig deeper: Are there products for which it is difficult to produce an EPD, or is actually only a question of willingness?*

**Peters:** It is only a question of willingness. There are, however, limits at which it becomes clear that this would entail too high costs. And there are also limits due to companies and industries which find life cycle assessments difficult.

*The political requirements for sustainability in building are increasing. Could you imagine the EU asking the IBU to become more integrated institutionally?*

**Prof Bossenmayer:** I have long since been of the opinion that it must be so, as otherwise we will not manage. For example, take the EU Green Deal: As chartered

private institutions, we will have to carry out a large number of sustainability tasks if we actually want to achieve all this by 2050.

**Peters:** It is indeed a destination that we can also very easily imagine. We are a know-how holder in Germany, and through the ECO Platform, ultimately in Europe also, and we are definitely interested in approaching the topic of the life cycle assessment or ultimately the resource balance in a neutral, comprehensive way.

*I would finally like to take a look at the future with you. What will the IBU look like in 2050?*

**Peters:** There are two clear scenarios. In the first there is no longer any need for the IBU. The IBU has dug the channel in which the “water of the sustainable products” runs its course. In the second scenario the IBU continues to be an important partner, which still transfers

scientific findings and political will into industrial thinking and industrial processes, i.e. makes them applicable. I personally believe that in the next 30 years it will definitely still be necessary to use institutions such as the IBU as a useful link for providing advice and information for such processes.

*Prof Bossenmayer, what is your vision 2050 for the IBU?*

**Prof Bossenmayer:** In the long-term I clearly see the IBU as a notified body, i.e. a body that is authorised to undertake tasks for the assessment and verification of the constancy of performance of construction products within the framework of the European legal provisions. To do so, it is necessary to come into play, and that means maintaining contacts with the European parliament and the commission.

*Thank you both for the interesting interview! ●*



**“We recognised at a very early stage that the topic of environmental product declaration or life cycle assessments would be very important in the future.”**

*Hans Peters, Chairman of the IBU*

## Mr Peters ...

### ... on the tasks of the IBU

“Our objective is to validate all construction works-related products permanently. This is also reflected in the concept of the life cycle assessment. It is ultimately a case of making the end result assessable, not the intermediate products.”

### ... on social responsibility

“Companies that think that they can simply continue with their current production pattern in future, without supplying solutions for the tasks of the next generation, will fail. I therefore consider it to be right for the industry to be committed to future issues and to try to remain active in a relevant leading role.”

### ... on the need for more circular economy

“The responsibility we have extends beyond the topic of climate protection. In the long run we cannot afford to tip recoverable materials into depressions or to heap up mountains with them. We have to think in economic cycles. Copper, iron, gold, as well as standard resources such as gravel and sand are becoming increasingly scarce and yet we still continue to spread them arbitrarily on the Earth. Here we must establish independence through urban mining and recovery.”

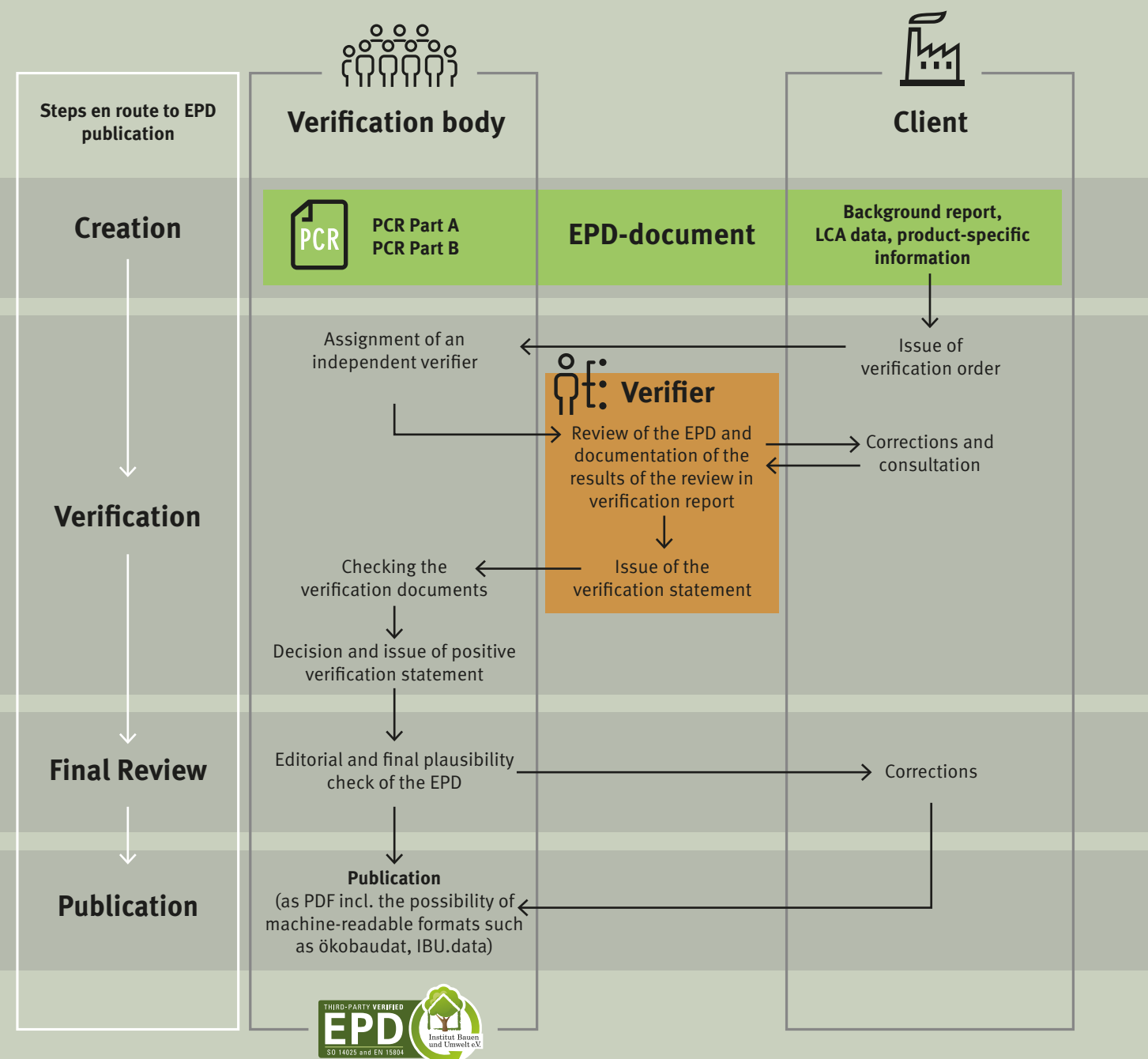
### ... on the further development of the IBU

“The further development of the IBU must extend the pure life cycle assessment, which is to a large extent focussed on the topics of energy and climate control, i.e. topics concerning the global warming potential. In future we will have to concentrate far more on the neutral design of our environment, i.e. the topic of the circular economy. This means that, in addition to life cycle assessment, focus will also shift more towards resource balancing and resource management.”

Own EPDs:

# The effort is worth while!

## The EPD creation process



With the publication of EPDs by IBU, not only does the quality of life cycle assessments increase, but also further use of the data becomes significantly easier.

from construction materials were shown to be lower by between three and seven percent. Because EPD data are checked independently, they are significantly more precise than the generic data. This is what accounts for the quantifiable difference here.

Companies, of course, also benefit from other EPD advantages: This is because they generate valuable information about the ecological properties of their product. Potential for optimisation can then be derived from this. EPDs are also useful in communication with business partners and can potentially provide the decisive competitive advantage in calls for tender.

### The certification process facilitates orientation

However, small and medium-sized companies especially are often sceptical: After all, they not only have to fulfil the requirements of the European “EPD standard” EN 15804. They should also bear in mind various national and international provisions, especially for international projects.

EPD programme operators such as the IBU ensure orientation here in the jungle of declaration and certification systems. A clear time schedule serves as a guide rail. Companies that aim to create an environmental product declaration for a specific product or product group opt for a product category rule (PCR) and, with the help of life cycle assessment experts, create a life cycle analysis of the respective construction material or the component. Together with additional information, the data are then transferred into suitable forms in the IBU online tool and are checked by an independent verifier. After any questions have been clarified the IBU publishes the EPD.

This means that companies can be certain that their environmental product declarations will be useable in diverse contexts. The key words are digitalisation and standardisation. Because in the meantime the IBU provides all EPD data in the IBU.data database, machine-readable in the open XML standard. After registering, end users can view all data records there free of charge, they can even download them and, for example, import them into their own design tools.

### IBU is committed to more standardisation

Once they have been published in IBU.data, the EPD data also find their way into other data sources. Interfaces exist, among other things, with ÖKOBAUDAT and with the “eLCA” tool for building LCA that was developed by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (“Bundesinstitut für Bau-, Stadt- und Raumforschung” - BBSR) for building LCA.

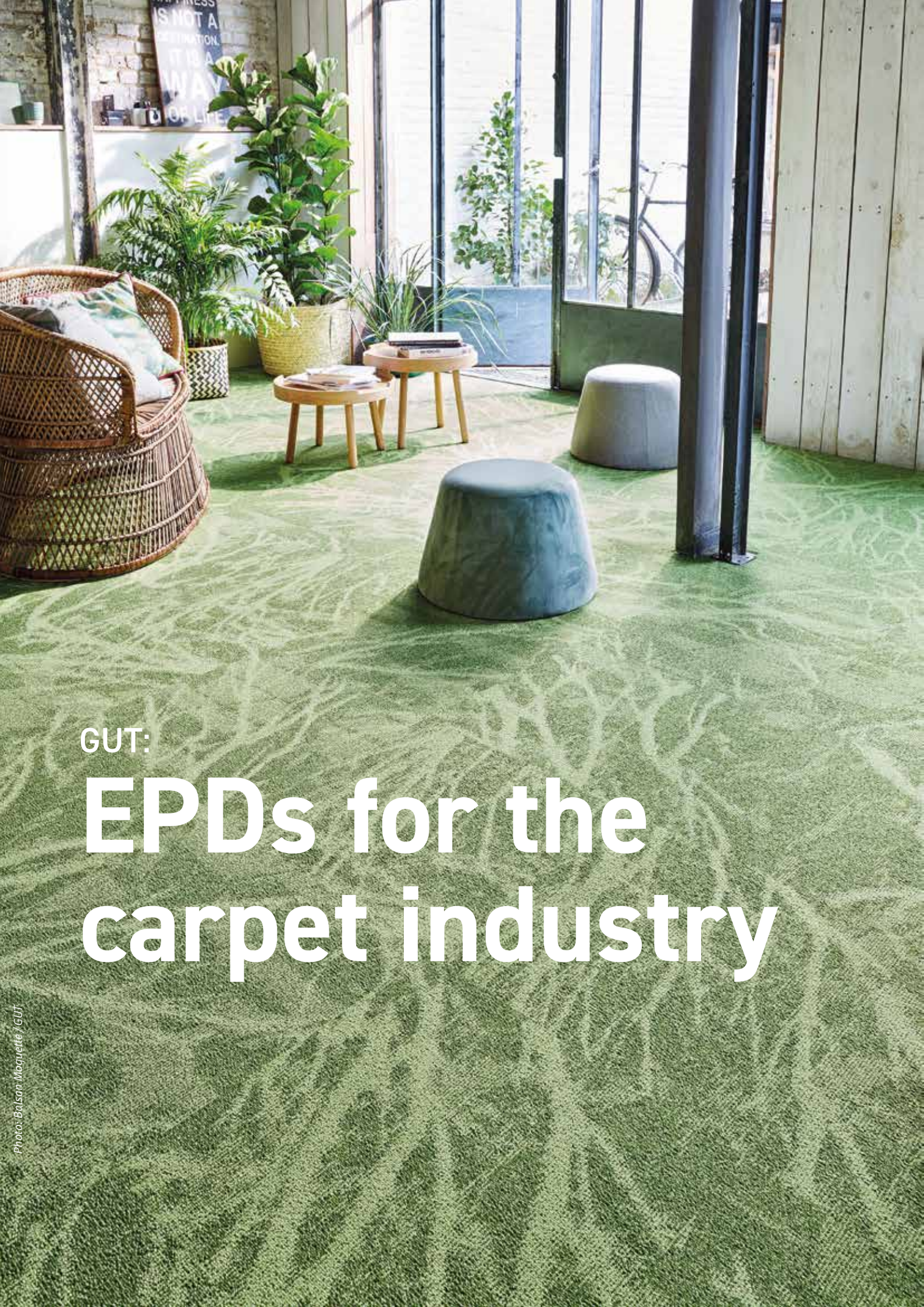
The IBU also cooperates with the BBSR within the international “InData” network, which aims to simplify the exchange of environmental data. EPDs should be provided in an open format and web-based.

The IBU product information system SuPIM is also moving in a similar direction. It can be used to collect product-related sustainability data in a central location in the EPD online tool and transferred into datasheets, which each meet the requirements of building certification systems such as DGNB, LEED, BNB and BREEAM. Auditors for these programmes as well as planners and designers, architects and consultants and owners or developers can search in and view all relevant product data and verification documents. ●

For companies, the time and cost involved in creating their own environmental product declarations (EPDs for short) in cooperation with programme operators such as Institut Bauen und Umwelt (IBU) are certainly worthwhile. For example, in this way the assessment in the certification system of the Deutschen Gesellschaft für Nachhaltiges Bauen (DGNB) is improved by up to 15 percent for certain environmental impacts. This was shown by a study of the Fraunhofer Institut in 2019. Building certifications to the DGNB or US American LEED standard are frequently demanded, especially for new public and commercial buildings.

The Fraunhofer researchers therefore compared life cycle assessments on the basis of EPDs with so-called generic data, which are provided on the basis of generally accessible sources, for example, in the ÖKOBAUDAT database of the German Environment Agency. The result: Especially in particularly energy-efficient buildings, where the building fabric accounts for a larger share of the environmental impacts of the building than the energy consumption during the use phase, environmental impacts





GUT:  
**EPDs for the  
 carpet industry**

The Association of Environmentally Friendly Carpets (“Gemeinschaft umweltfreundlicher Teppichboden” - GUT) calculates the EPDs for its member companies that operate throughout Europe. This has many advantages, as the Managing Director of GUT and member of the IBU Board, Dr Edmund Vankann, knows well. He explains what they are and how the modular system works in the interview.

Photo: Dr Edmund Vankann



Dr Edmund Vankann,  
 Managing Director of GUT and  
 member of the IBU Board

*Dr Vankann, let's start from the very beginning. GUT was founded in 1990, what was the intention at that time?*

The focus was initially on improving the quality of indoor air. At that time there were intense discussions on pollutants in indoor environments. GUT then began to check the products of the carpet manufacturers for emissions, pollutants and odours. Enhanced environmental awareness was, however, already anchored in the GUT's statutes at that time. And so we started our initial deliberations on life cycle assessments in 1997. I still remember well, how many people at the time asked us: Why do we have to concern ourselves with this? We did it nonetheless and then reaped the benefits later: Since around 2007, we have been one of the first in the industry to calculate complete life cycle assessments, not only for specific individual products, but also for all kinds of different combinations of raw materials and production methods.

*And were the pioneer for the carpet industry?*

Correct. We were even one of the first to create EPDs for floorings. Directly after that, together with colleagues in the flooring industry, i.e. resilient, laminate and textile floorings, we worked on a PCR document (Product Category Rules), for the harmonised calculation of EPDs. This PCR was already created in cooperation with the IBU.

*You have to explain that to us in greater detail!*

Before there was an idea of an EU standard, all three flooring sectors had been working together on an IBU PCR. And with the very clear objective of setting up clear harmonised rules for different floorings from the outset. This IBU PCR was then used as the basis and, in conjunction with the EN 15804, was incorporated into the corresponding CEN PCR standard EN 16810 “Resilient, textile and laminate floor coverings. Environmental product declarations. Product category rules”.

*Why did you choose the IBU as your programme partner?*

From the beginning we tried to harmonise everything as far as possible. We decided in favour of the IBU system at an early stage, which at the time was already very closely based on the still draft EN 15804, to avoid the EPDs in our segment being calculated according to different systems. We wanted to work with a reliable programme operator who is active Europe-wide, above all in order to create fair conditions for the whole industry.

*In the meantime GUT has already created more than 300 EPDs with the IBU. What kind of EPDs?*

Most of the EPDs that we calculate are manufacturer-specific EPDs. We have been doing this for around twelve ▶



### The seal and label at a glance

**GUT seal:** The GUT seal is only issued to products that meet the GUT criteria for pollutant levels, emissions of volatile organic compounds and indoor air quality. The seal confirms that the respective textile flooring has been tested by one of the recognised test institutes.

**PRODIS:** The product information system for textile floorings contains information on environmental impacts, on consumer health and on safety aspects. It also provides information about the product's areas of use.

**Product passport:** The product passport is a further development of PRODIS and contains additional information on a textile flooring, for example, the precise material composition, and links directly to the EPDs and other product-specific documents.

Further information is available at [www.pro-dis.info](http://www.pro-dis.info)

### Gemeinschaft umweltfreundlicher Teppichboden (GUT)

Founded in 1990, initially as a German registered society, Gemeinschaft umweltfreundlicher Teppichboden (GUT) now represents the interests of the majority of European carpet manufacturers. The association members are responsible for almost 90 percent of European production of textile floorings; not only as construction products but also for other sectors, for example, car carpets and outdoor applications (including artificial turf).

years. We also created generic EPDs from the outset, which we need, for example, for our product information system (PRODIS). In this way we can nonetheless also provide EPDs on a generic basis for the manufacturers who, for example, work in the private sector, where product-specific EPDs are not yet in demand. These are then average EPDs, which do not describe a specific product but an entire product group. We cover more than 80 percent of all products in this way.

*Where does the data for these average EPDs come from?*

As we permanently have the up-to-date data of our manufacturers, we can also derive the data for the generic EPDs relatively easily, without having to carry out complex data collection. We therefore always have access to up-to-date data. We have developed individual modules for the different process steps and materials, that can be combined in any way, no matter which combination of material or processes is required. Furthermore, in this way we can also perform simplified calculations, to show a manufacturer what effects the use of new materials could have on certain impact categories.

*What does that mean for the manufacturers?*

The modular structure is extremely helpful for the calculation of manufacturer-specific EPDs: The manufacturer does not have to search for a life cycle assessor each time, who then starts again from the very beginning. Thanks to our long-standing work we also have a deep insight into the relationships between the individual production processes. With our system an EPD is created significantly faster.

*What does faster mean?*

Even though it is a simplified procedure, this of course does not mean that a veri-

fied EPD is available at the press of a button. It all has to be properly documented. The verifiers want a proper background report, the calculations must be correct and the manufacturers' supporting documents must be available. It is still a considerable amount of work, but it is organised differently. We have a small team here that creates these specific EPDs for the manufacturers and organises the entire processing at the IBU. This currently also applies to the transfer of IBU EPDs into the French FDES system.

*Can you explain that in greater detail?*

In France there is a legal regulation that specifies EPDs according to the mandatory French system (FDES). As a result, an increasing number of manufacturer's require these FDES documents. As the IBU has an agreement with the French programme operated, we can also make an FDES document based on the database of our IBU EPDs. For our members, this is the shortest way to meet the requirements in France. The same also applies, of course, to all other partner programmes, for example, with UL for the US market.

*EPDs are used mainly in the sustainability assessment of buildings. What role do textile floorings play in the overall building context?*

The overall effect of a flooring in a building is actually not so large. But as floorings are a directly visually perceptible construction product unlike, for example, insulation materials that are not seen directly, the interest in them is also relatively large. Especially with the building certifiers and, for example, the DGNB we not only have the demand for EPD data, but also the demand for the indoor air quality properties. I.e. the freedom from emissions of the products. All products for which we calculate EPDs through the IBU are therefore always also emission and pollutant tested according to the

“  
We have a small team here that creates these specific EPDs for the manufacturers and organises the entire processing at the IBU.”

*Dr Edmund Vankann*

because if I attribute a specific life to the product, then it must also be used in the corresponding use environment. A flooring that is only suitable for use in private areas, for example, should not be laid in a highly trafficked hotel corridor. It would not survive there for long. The consequence would then be premature replacement. It is therefore important to choose the right product, especially under sustainability aspects.

*You recently also presented a new seal. What was that about?*

We developed the so-called product passport. It contains a great deal of further information on the respective textile flooring, in addition to the GUT seal information and our product information system. For example, the precise material compositions, as well as the content of recycled materials in the product. The product passport is the next step, as it were, in the direction of the circular economy system. It is also linked from the outset to the corresponding EPDs.

*How important do you believe the circular economy will be for your industry?*

Achieving the right entry into a circular economy system will be decisive. To this end, we have also worked out a circular economy strategy and life cycle assessment considerations play an important role in it, of course. We have to ask ourselves which materials are used, which material combinations are particularly recycling-friendly, and what are the resulting effects on the complete life cycle assessment? EPDs are currently still relatively linear, here we must use suitable approaches to try to close the circle. However, this will require simple and transparent communication methods. The EPD must not be allowed to become a data graveyard.

*Thank you for taking part in the interview! ●*

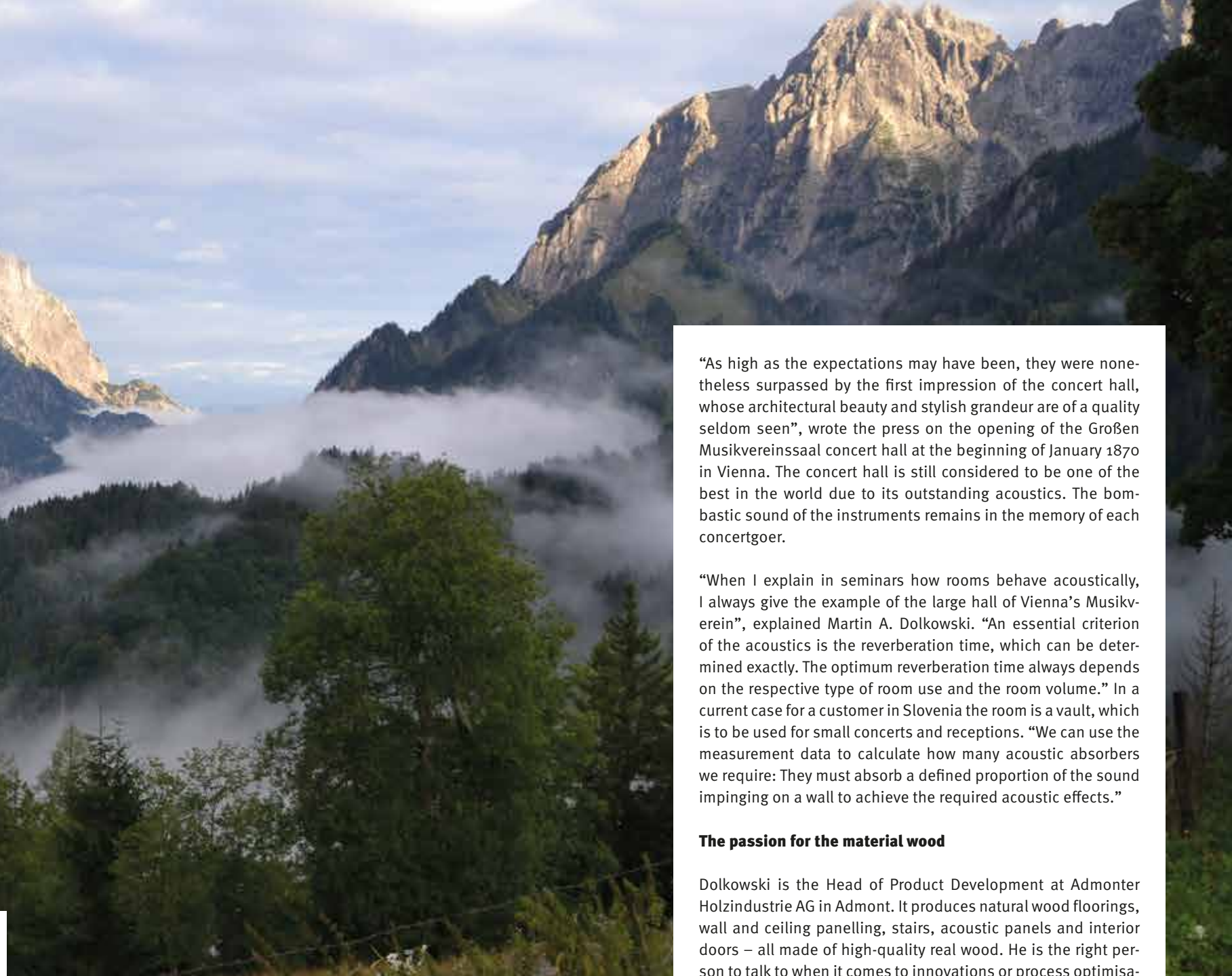




Admonter:

# Life cycle assessment opens up new business idea

Photos: Admonter



“As high as the expectations may have been, they were nonetheless surpassed by the first impression of the concert hall, whose architectural beauty and stylish grandeur are of a quality seldom seen”, wrote the press on the opening of the Großen Musikvereinsaal concert hall at the beginning of January 1870 in Vienna. The concert hall is still considered to be one of the best in the world due to its outstanding acoustics. The bombastic sound of the instruments remains in the memory of each concertgoer.

“When I explain in seminars how rooms behave acoustically, I always give the example of the large hall of Vienna’s Musikverein”, explained Martin A. Dolkowski. “An essential criterion of the acoustics is the reverberation time, which can be determined exactly. The optimum reverberation time always depends on the respective type of room use and the room volume.” In a current case for a customer in Slovenia the room is a vault, which is to be used for small concerts and receptions. “We can use the measurement data to calculate how many acoustic absorbers we require: They must absorb a defined proportion of the sound impinging on a wall to achieve the required acoustic effects.”

## The passion for the material wood

Dolkowski is the Head of Product Development at Admonter Holzindustrie AG in Admont. It produces natural wood floorings, wall and ceiling panelling, stairs, acoustic panels and interior doors – all made of high-quality real wood. He is the right person to talk to when it comes to innovations or process optimisation at Admonter. The trained wood technologist not only knows every detail of the wood material, but has also studied innovation management. The development of the acoustic absorber is significantly thanks to Dolkowski: “My everyday work is very varied. In some phases of product development the designer is in demand to make the products visually attractive, while in other phases it is facts and figures that are important, in which each place after the decimal is decisive.”

Whether he now tries to work out sketches of new ideas with a block of paper and a pencil, analyses measurement data at the computer or tests the behaviour of the Admonter products during simulated seasons in a so-called climatic chamber: His passion for the material wood is present in all his tasks. Created by nature, for him wood cannot have a defect: “A several centimetres large knot in the middle of a floor board – a supposed wood defect? Question, who has seen living trees in the woods without any branches? Branches are vital for trees. I therefore always speak of characteristic wood features and not of defects.” ▶

Woodworking has a centuries-long tradition in the Austrian region of Admont. This was partly written by the Admonter Holzindustrie AG, which produces parquet, wall panelling, stairs, acoustic panels and interior doors made of high-quality real wood. An environmental product declaration (EPD) of the IBU helped it to develop a groundbreaking product innovation, which has been patented.



### Admonter: Sustainability has tradition

No wonder, therefore, that Dolkowski has already worked for more than a decade for Admonter Holzindustrie AG, which was founded in 1972 and now has 300 employees. The company is thus a large employer in the region. As an enterprise of the local Benedictine monastery, long-term thinking of ecology and economy has tradition here. Also, knowledge about woodworking in the densely wooded area around Admont extends back over centuries. “We only produce here, locally. In that way we ensure the high quality of our products and the economic wellbeing of the region. We also only process PEFC-certified wood from sustainable forest management.”

The topic of sustainability has always played a central role in the company. It has its own siding, so as many raw materials as possible are transported by rail, the energy for the production comes, among other things from biomass from wood by-products. In order to ensure recyclability and cascade use of the products, paint coatings are avoided to the extent possible. “From the outset our motto was to produce sustainable products with a small environmental footprint. The problem: For a long time there was no normative standard that could cast that in figures”, said Dolkowski.

### First the life cycle assessment, then EPD

This changed as the term life cycle assessment emerged in the 1990s, which later manifested itself in the ISO standard 14040/44. This defines what a life cycle assessment is and how it is performed; roughly a hotspot analysis of a product within its life. “We did the first life cycle assessment in 2008, our EPD was prepared in 2015.” This quantifies, in the form of life cycle assessment, for example, the contribution of a construction product to the global greenhouse effect, to ozone depletion, to acidification of soil and water or to resource scarcity.

**At Admonter they try to keep the transport routes of the wood as short as possible. This is one of the reasons why it has always done without using tropical timber. It is also aware of the danger of not being able to guarantee the sustainable production of the raw material. Admonter uses a special thermal treatment, however, so that its customers do not have to forego the look and mechanical properties of tropical timber. In this process, individual constituents of domestic timber are specifically modified without the use of chemicals, solely by the application of heat.**

The entire life cycle is analysed; from the production of the raw material to the processing through to information about dismantling, recyclability and the need for landfill: “An engineering consultancy from Vienna assisted us with the creation of our EPD for Admonter multilayer solid wood products. They helped us to determine the relevant impact categories and then performed the calculations”, reported Dolkowski. EPDs provide the basic information for evaluating the ecological quality of buildings. This in turn is essential for the integrated consideration of construction works and for their sustainability assessment by the Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB) or the Leadership in Energy and Environmental Design (LEED). The principles and methods are described in ISO 14025. The IBU also has the EPDs checked according to the European standard EN 15804 by independent third parties: “We decided to work with the IBU, because in our opinion it is the leading provider of EPDs in Europe.”

### EPD brings a new business case

However, Admonter’s customers cannot only use the EPDs to increase their market opportunities in green building tenders or to strengthen their communication with other companies and customers. In many cases the analysis within the life cycle assessment of the EPD contributes to the optimisation of existing processes

or products. At Admonter the creation of the EPD for the multilayer solid wood products with the acoustic absorber even led to a new business idea.

The background: In a life cycle assessment, the data within the impact categories are always given per kilogram product: “But we do not sell our flooring by the kilogram but in square metres”, laughed Dolkowski. “As we converted our data to square metres we found that we had already exhausted almost all potential optimisation options in the manufacturing process.” As a result, at Admonter we chose a radical approach and reduced the weight per square metre of the product by more than half. The room acoustic efficiency was an initial side effect: “As long as the function and the quality remain the same, the customer doesn’t care whether they have ten kilograms per square metre or only four.”

The basis for the weight reduction per unit area was the development of a new substrate construction, in which an extremely lightweight sinusoidal honeycomb layer made of cellulose fibres is used alongside the thin solid wood outer layer. At the same time, sufficiently good mechanical properties continued to be achieved. These lay-ups are not necessarily suitable for floorings, but in wall panellings and the acoustic absorbers in development at the same time, thanks to the special honeycomb geometry, the sinusoidal honeycomb displayed an unexpected property: “The actual surprise came to light during simulations and initial acoustic measurements, because the lay-up that had been developed proved to have acoustic absorption values of 100 percent over a wide frequency range – i.e. what is physically possible in these areas! This was then also confirmed in the test laboratory of the TU of Graz.”

The cornerstone for the new “Admonter Acoustics” product division was thus laid. The acoustic absorber developed in this way has in the meantime been extended several times, the technology behind it has been patented. ●



1. – 3. Martin A. Dolkowski during the acoustic test



Photo: Erikamayerphotography / Admonter



dormakaba:

# EPDs help to optimise processes and products

When it comes to products and solutions for secure entrance to buildings and rooms, dormakaba is a specialist in much demand. For many years, Joachim Zeffass, Lea Kullmann and Melanie Schaumann have formed the centre of excellence there on the topic of product declarations, sustainable building and building certification systems. They know what needs to be paid attention to when creating EPDs to ISO 14025 and EN 15804 and what their advantages are for companies.

The Elbphilharmonie has become a centre of attraction, not only for classics fans. Visiting the concert hall completed in 2016 is now a must on each visit to Hamburg. On entering the publicly accessible plaza or when stepping into one of the concert halls, among all the architectural splendour, festively clad concert visitors as well as daytrippers may possibly not notice that the visitor management and the control of visitor streams also satisfy the highest standards.

dormakaba is responsible for ensuring that all guests get into the different public and non-public areas of the “Elphi” safely, conveniently, and without barriers or physical contact. The corporation formed in 2015 by the merger of the Ennepetal fam-

ily-run business Dorma with the Swiss corporation Kaba is represented with a large number of products in the new Hanseatic city landmark – from the automatic ED 250 swing door operators to the ITS 96, TS 93 and BTS 80 door closing systems through to the OGRO stainless steel door furniture. dormakaba gained acceptance among the project designers not only due to its known product quality, but also because environmental product declarations (EPDs) were provided for all the named products. The Elbphilharmonie designers thus received a transparent overview of the ecological impacts of these components.

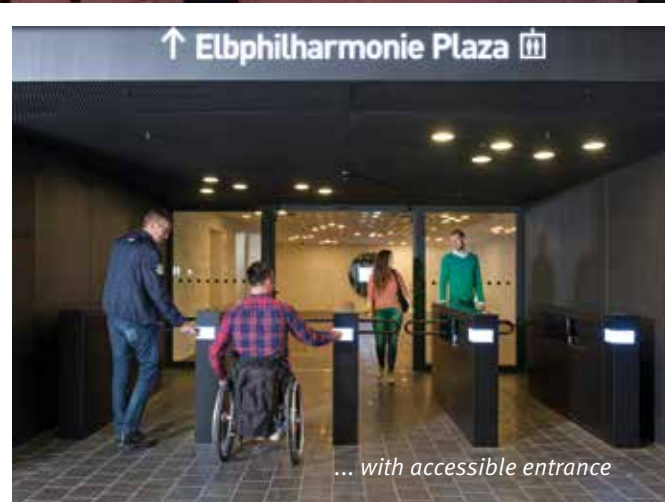
dormakaba is specialised in adapting its products to customers' needs. This becomes particularly clear in the case of the Ker- ▶



Photo, top: Elbphilharmonie / Maxim Schulz, bottom left: Elbphilharmonie / Michael Zappf, bottom right: dormakaba



Argus sensor barriers by dormakaba ...



... with accessible entrance



*Sustainable projects manager  
Lea Kullmann (right) with  
her colleagues*



Photos: tomasrodriguez.de/dormakaba

beros tripod turnstiles and the Argus sensor barriers also installed in Hamburg. On the one hand they were visually adapted to the “Elphi look”, but on the other hand their designs were also changed to take into account the particular situation of a concert hall. For example, this means the following: The Kerberos tripod turnstiles were especially widened so that they can also be passed through in an evening gown. Five Argus HSB sensor barriers were in turn coupled with automatic door elements and now enable accessible entrance for people with disabilities or even families with small children.

#### **All new products are issued with EPDs**

As for most of the components selected for the Elbphilharmonie, dormakaba now describes the environmental impacts of many of its existing products and for all new products in EPDs. Often – as in the case of the current Argus systems – additional “Health Product Declarations” (HPD) are also created to describe the health effects. “As an internationally established company, dormakaba also offers other product declarations required in the markets, for example, the HPDs. These product declarations are often based on the existing EPDs. This is intended to ensure that the data provided are complete and plausible. In fact a reference to the EPDs is even provided or required within the different public declarations”, explains Lea Kullmann, Manager for Sustainable Projects at dormakaba.

In total, dormakaba has currently published around 40 EPDs for products and product groups on its websites. Professionals in the construction industry such as consultants, architects and investors thus receive reliable facts and figures about the environmental impacts of the construction products throughout their entire life cycle. The data form the basis for calculating and assessing the sustainability performance of buildings, which is relevant within the scope of building

certification systems such as that of the DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen).

dormakaba has also created EPDs for several models of the Argus sensor barriers. Customer-specific Argus variants are preferably found in the entrance areas of firms, banks, authorities, ministries or museums. Building designers who are interested in an Argus sensor barrier can see from the environmental product declaration for the Argus 40 model, say, that it weighs 94 kilograms in total, it is made up of 69 percent of aluminium, twelve percent of stainless steel and seven percent of plastic and almost all materials can be recycled later. During the production and delivery of the components a total of 712 kilograms of CO2 equivalents are released – assuming a useful life of 20 years – 1,420 kilograms are released during operation.

#### **One of the German EPD pioneers**

The fact that Dorma and later dormakaba became a pioneering company for the transparent provision of environmental information is also thanks to Joachim Zerfass. As the then Director for Global Customers & Building Projects and Head of Project Management in Central Europe at Dorma/dormakaba, he experienced up close how, a good ten years ago, the demand for information about the environmental impacts of construction products also became increasingly stronger here in this country. At the time the USA took a pioneering role in the topic of building certification – an important market for dormakaba then as well as now. The “Leadership in Energy and Environmental Design” (LEED) was introduced there from 1998. By way of comparison: The DGNB certification system was not developed until 2009.

“A large number of enquiries from our US colleagues caused us to monitor the market more precisely. We quickly recognised that the availability of environmental

product declarations and environmental information would become indispensable, especially for international calls for tender”, he remembered. After initially falling back on the general EPDs of the Lock and Hardware Industry Trade Association (“Fachverband Schloss- und Beschlagindustrie” - FVSB), Dorma quickly began to create its own environmental product declarations. “The management made a clear commitment to deal with this topic and to initiate the required measures”, Zerfass is still pleased to say today. This was also manifested in 2011 by the creation of a “sustainable projects” department, which deals with the sustainability of the international markets centrally.

#### **Centre of excellence for product declarations**

One of the sustainable project managers is Lea Kullmann. Together with her colleague Melanie Schaumann, she is responsible for the topics of sustainability and environmental product declarations in the “DACH access solutions” segment. Anyone who tries to reach her by phone must bring plenty of patience. “I have a lot to do”, is how she explains this circumstance. No wonder, as her department forms the “centre of excellence for product declarations in the dormakaba world”, as she names it.

The experts offer their colleagues regular EPD training courses and answer questions that reach them continuously from all departments of the company. However, equally important and time-consuming is the networking with national and international players, to ensure the experts are always kept up-to-date and to identify trends quickly.

Lea Kullmann considers the heart of her work to lie above all in providing information and support for the EPD creation process, from the initial idea through to the final declaration and publication by the IBU. During this time, innumerable data



#### **IBU benefits from the know-how of the manufacturers**

As a programme operator, the IBU is the relevant authority for the verification and publication of EPDs for construction products and components. At the same time, the relationship between the IBU and its member companies is characterised by intensive communication between them.

“The IBU also relies on the know-how of the manufacturers”, emphasised Lea Kullmann. The institute therefore repeatedly takes up the ideas of its members. Only recently, for example, at the suggestion of dormakaba and following discussion in the independent advisory board, the sensor barriers product group was included in an existing PCR. The example shows the close and goal-orientated cooperation between manufacturers, the IBU as well as other experts and the interested public.

Other companies then also benefit from this commitment and these further developments in the creation of their EPDs.

must be collated and assessed. “The colleagues provide a large amount of information, which has to be evaluated and checked. We thus function as a coordination centre, coordinate the data collection process and the downstream creation of the EPD and are contacts for all topics”, says the EPD specialist, providing an insight into her tasks.

The complexity of the information to be provided can be shown in the example of an apparently simple product: “A door closer alone is made up of more than 100 components”, said Lea Kullmann. It is now necessary to determine where each of these were produced, what they are made of, what the transport routes are and what the subsequent disposal effort is. Only part of this often sensitive data is published in the subsequent declaration document.

#### **More international harmonisation**

However, data collection alone is not the end of the work. The information must then be processed so that it meets the requirements of the relevant ISO and EN standards. Especially for international projects, it is definitely important for the EPDs to meet the international requirements. “In the case of major projects, for example, realised in the Middle East, the company issuing the call for tenders can be in the USA while the general contractor comes from China. In these cases it is particularly important to use an internationally accepted format, for example EPDs, as these are recognised by the established building certification systems.”

From this account it becomes clear how useful international harmonisation of the different product declarations would be. Joachim Zerfass, who has been a Member of the Board of the IBU for a year, is also advocating for this. For example, he is tracking the ongoing efforts to establish a standardised European system for product category rules (PCR) and EPDs.

The effort involved in the creation of EPDs is also definitely considerable. However, specialist Lea Kullmann is convinced that the effort is worthwhile. In this way, full transparency is acquired about the resources and energy consumption, as well as the delivery routes of a company’s own products. Customers and other stakeholders could consult the published EPDs on various channels – on the internet, in diverse databases as well as at trade fairs and events. At dormakaba the declarations in turn are used for product-related media such as technical brochures and tender specification texts.

In Lea Kullmann’s opinion another advantage of the environmental product declarations should also not be underestimated: “EPDs help to identify optimisation potential in the production process or in the product itself.” ●



Dr Alexander Röder,  
Managing Director of the IBU

## Holism as an orientation framework

**H**olism has many meanings, especially for the future of the IBU. Here the meaning as a comprehensive perspective suggests itself. While during the first decades the focus was on the energy consumption of buildings, with the achievement of zero or plus-energy buildings, the relationship has shifted continuously from energy efficiency to the life cycle assessment of the materials used including a more holistic or integrated approach, which includes systematic consideration of the entire life cycle – from the initial planning idea to the extraction of raw materials and their further processing, the construction of new buildings or conversion and renovation measures, the supply of buildings with heat and light through to

the disposal of waste as well as use and dismantling.

The IBU also takes this into account by taking up these future topics in its daily work. This currently means extending the database for circular value creation in the construction industry through corresponding adjustments in the EPD, because according to EN 15804 + A2, from 2023, modules C and D (dismantling and recycling) will be mandatory for the majority of products. This prepares the way from a mainly linear to a resource-efficient, circular consideration. Nevertheless, practical implementation of this requirement poses a significant challenge for our members, since it is primarily the recycling companies that can provide the

required data. This gap should be closed in future by the new circularity module CMEPD; specific information on the recycling of certain product groups and material types can then be very easily integrated in the EPDs of the corresponding construction products.

The next step, and already in preparation, is therefore an IBU pilot project in which manufacturers, in tandem with recycling companies, develop the key parameters for future applicability for EPD owners ([www.ibu-epd.com/cm-epd](http://www.ibu-epd.com/cm-epd)).

Our view of digitalisation must also be characterised by holism or an integrated approach. We must not limit the thrust of digitalisation to the data user, to in-

tegration in BIM. We must also use the potential of digitalisation to simplify the creation of EPDs. Above all, here the aim is to consistently think ahead regarding the topic of EPD tools, in order to map the entire value-adding and process chains for EPD owners, more simply and at the same time more efficiently.

We are increasingly using international cooperation to achieve this in a way that is fit for the future. This not only includes continuous networking with politics and administration within the national and European region but also the further development of ECOPlatform and InData, in order to provide incentives and thus to promote the general conditions for the use of EPDs. ●

## Prospects for sustainability information

**W**ith the European Green Deal from December 2019, the European Commission commits itself to the transformation of the economy for a sustainable future. The built environment is given a key role in this: the entire life cycle from the erection to use (including management and maintenance) through to the dismantling of the building area throughout Germany accounts for approx. 40 percent of material use, 52 percent of the waste produced and 40 percent of greenhouse

gas emissions. Especially against the background of the long life of structures, the particular sense of urgency and the need for action in this sector becomes clear. For these reasons, building and renovation is one of the eight core policy areas of the Green Deal. Sustainable development through to energy saving and resource-efficient construction methods are to make a significant contribution.

Specific indications of this development are the discussions about BWR7+,

i.e. about the merger, restructuring and definition of the content of the fundamental, sustainability-relevant requirements of construction works in which resource management is also to be incorporated in the interests of conserving natural resources.

For many aspects of sustainability, for example, protection of the climate by recording and reducing greenhouse gases, life cycle assessment has proven to be the tool of choice – this must be mean-

Hans Peters,  
Chairman of the IBU

ingfully built upon. The documentation of the use of resources by recording, quantification and qualification can supplement the EPD format.

As a central contact point for all sustainability-related information about construction products, the IBU must not only see itself as an administrator and verifier of information, but also as an intelligent interface between politics, science and the economy. The IBU will continue to pursue this path in the future while retaining its principle of strict material and technology neutrality, the performance orientation of products and the assessment approach at building level. ●

# “Guided by the Future”

Symposium on the challenges + opportunities for sustainable building



31 May 2021 in Berlin

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Focus on the detail.  
Big picture thinking.

## Dates to note in 2021

### Monday, 31 May 2021

#### “Guided by the Future”

Symposium on the challenges + opportunities for sustainable building

### Tuesday, 01 June 2021

#### IBU Annual General Meeting 2021

Full of optimism, we believe that it will be possible to meet again in the early summer of next year. We are therefore already working on the preparations to celebrate our 40-year anniversary with you – albeit somewhat delayed.

The symposium, originally planned for June this year, will now take place on 31 May 2021. We are pleased that our speakers will be keeping this new date free for us.

Together with you, we will therefore be able to experience talks on current developments in the future topics of sustainable urban development, construction methods of the future, opportunities and challenges in the construction material industry through to the circular economy, and there will also certainly be plenty of opportunities to exchange ideas, for discussions and to establish and renew network contacts.

Take the time to attend our symposium and then spend a relaxed evening with us on the River Spree, before we discuss the important topics of the further work of the IBU with you within the framework of our annual general meeting.

Our symposium is also open to external interested parties; the annual general meeting is traditionally for IBU members only.

You can register for the symposium, evening event and the annual general meeting through our website:  
[www.ibu-epd.com/ibu-symposium](http://www.ibu-epd.com/ibu-symposium)

#### Imprint

Publisher:  
Institut Bauen und Umwelt e.V.  
Panoramastraße 1  
10178 Berlin, Germany  
Tel.: +49 (0) 30 3087 748-0  
Fax: +49 (0) 30 30 87748-29  
Email: [info@ibu-epd.com](mailto:info@ibu-epd.com)

Editing and layout  
of this issue:  
macondo publishing GmbH

Photos:  
IBU or as stated  
in the photo

Responsible acc. to the German  
press law: Dr Alexander Röder

Climate-neutral printing,  
FSC-certified paper

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ECOLOGY

COMMUNITY

SUSTAINABILITY

CONSTRUCTION PRODUCTS

DECLARATION

EPD

EPD

EPD

EPD

EPD