



An Introductory Guide
to the European Wide Sustainability Agenda

The European Federation of Associations of Locks and Builders Hardware Manufacturers



Executive Summary

The regulations impacting our industry are about to change – and those changes will be legally binding across all ARGE members.

The introduction of the Construction Products Regulation (CPR) across Europe this summer is going to change the market lock and hardware manufacturers operate in. The new regulation now addresses sustainability and the sustainable use of natural resources (under Basic Works Requirement 7 – BRCW7) together with the reduction of life cycle impacts of greenhouse gases (BRCW3).

The following ARGE guide includes all you need to know about these changes – why they are happening and how ARGE is going to help you meet with these crucial changes. So, if you want to ensure your business can still compete in the European construction market, you need to read on.

Introduction

Lock and hardware manufacturers need to be aware of the changes in the construction industry, due to come into force in 2013, but more importantly ARGE members and their associate members need to understand how ARGE is going to help you manage this period of transition to ensure your business is able to compete.

This can only be achieved if manufacturers and national associations understand the impact and importance of the forthcoming changes. Effectively the introduction of the CPR this July will require all construction works to be designed, built and demolished in such a way that the use of natural resources is sustainable. The CPR may require Environmental Product Declarations (EPDs) to assess a product's environmental impact.

To help you meet this change in the specification process ARGE want to generate Environmental Product Declarations for various building hardware products.

ARGE is generating plans to create entry-level EPDs, which will be available to and enable our members to pro-actively include them as part of their commercial offering to their construction market customers and end users. Unlike other building product sectors, such as timber or glass, the hardware industry has been slow to react and engage with the environmental agenda...but this is no longer an option.

Changes are happening – the question “if” sustainability will affect our members now becomes “when”.

It is now vital that manufacturers adopt a more serious stance on the issues and recognise the commercial implications. It is ARGE's aim to ensure that the commercial benefits of the changing environmental landscape are accessible for its members.

Why take it seriously?

- 1 First and foremost the introduction of CPR in July 2013 will affect the entire construction market – changing the basic requirements for buildings. The changes will stipulate that construction works must be designed, built and demolished in such a way that the use of natural resources is sustainable, according to Basic Works Requirement 7 – BRCW7 and together with the reduction of life cycle impacts of greenhouse gases (BRCW3).

To measure a product's life cycle impact, life cycle assessments (LCA) known as EPDs will be required under the CPR. The advent of Building Information Modeling (BIM) is also expected to call for EPDs to be a mandatory element.

Furthermore ARGE, amongst others industry bodies, will actively encourage the adoption of EPDs through building regulations and standards, putting its members, who will have access to its entry-level EPDs, at a significant commercial advantage.

Without EPDs you will not be able to meet with the requirements under CPR.

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- 2 In addition to the introduction of CPR, the recent ratification and influx of government standards and legislation operating at a local, national, EU and International (ISO) level outlining sustainability goals and best practice advice makes it difficult to operate in a competitive and commercial market without meeting with the latest standards.

It is apparent that without the basic legal compliance companies will not have access to domestic or international markets. Increasingly, government funded contracts demand certain environmental conditions, failure to meet these requirements can lead to exclusions from lucrative projects.

- 3 From July 2013 EPDs will be required on all government-funded projects in Germany and it is expected that many other European countries will follow suit. As well as automatic exclusion from certain Government tenders, improved environmental credentials can also give manufacturers a competitive advantage.

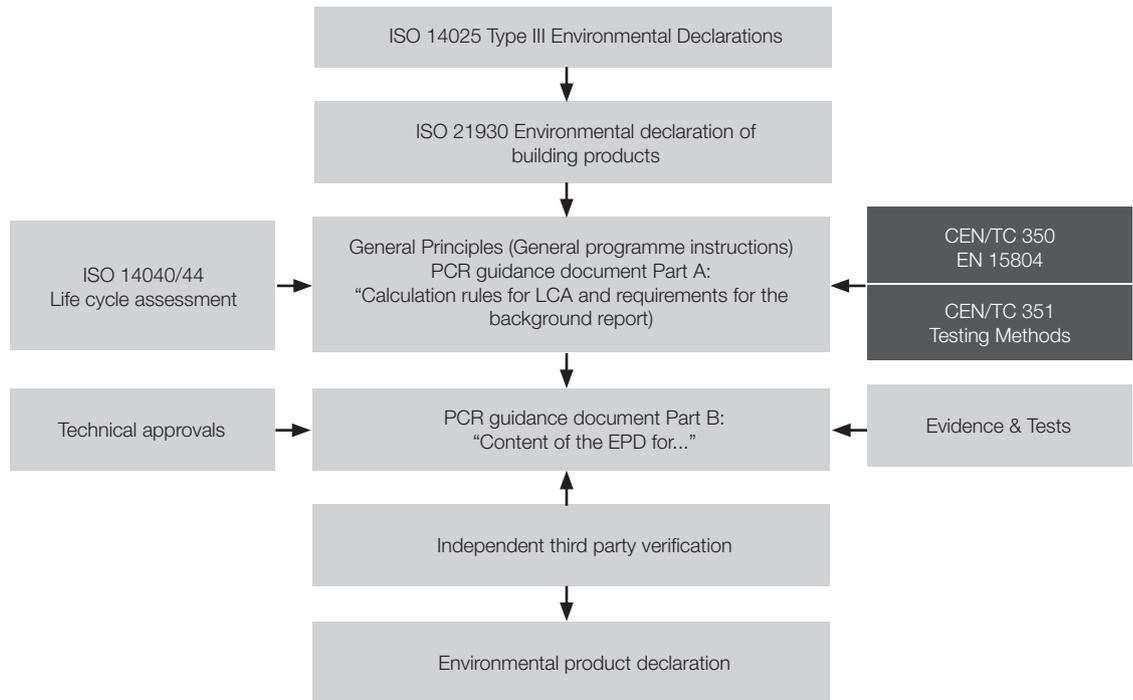
Building developers and investors, architects and specifiers, contractors and building occupiers increasingly want to improve their own sustainability credentials and have more access to information about the buildings they construct, sell and manage, either as a conscious choice or as part of their own competitive advantage.

- 4 Finally, most medium to large organisations have their own ethical and Corporate Social Responsibility policies, often to attract employees and potential investors. Using EPDs is inline with these types of policies and can help to boost a company's sustainable and ethical profile amongst its peers and competitors.

The Route to EPD

It has been established that EPDs will be mandatory for the growth and commercial success of any business. In this section we outline the background and development of the schemes and how they relate to each other.

Principle of Environmental Product Declarations (EPD)



Life-cycle Assessment

All products have an impact on the environment and this can occur at anytime during the manufacture, usage or end of life. These stages are collectively known as a Life-cycle. The measurement of the impact is called a Life-cycle assessment (LCA), which for construction products examines the impacts extraction of raw materials, processing, manufacturing, maintenance, refurbishment and eventual end of life and disposal.

There are two types of LCAs – generic and proprietary. Generic LCAs collate data from several manufacturers to create an industry average, whereas proprietary LCAs are specific to a manufacturer and their product. LCAs report on all significant environmental impacts associated with a product or process, and therefore cover a range of issues. Impacts most commonly considered in the Life-cycle of a construction product are:

- Climate change
- Acidification
- Eutrophication
- Stratosphere Ozone depletion
- Photochemical Ozone creation

Product Category Rules

Product Category Rules or PCRs are the common rules applied to EPDs, ensuring only EPDs with the same PCRs can be compared. To be comparable EPDs must have the same PCR, to ensure scope, methodology, data quality and indicators are the same. For compliant EPD, an independent verifier must critically review the LCA and ensure it has followed the PCR.

EPDs

Environmental Product Declarations or EPDs are the construction industry's vehicle for communicating the life-cycle assessment information. EPDs provide environmental data in a common format.

Many European countries have developed national LCA schemes producing EPDs. EPDs are published by Programme Operators, such as BRE or IBU, and in the main construction product EPDs are modular. This means that an EPD for cement can be used alongside one for aggregate, to produce an EPD for concrete.

The ECO Platform in Europe

The ECO platform is an enabling vehicle for pan European EPDs and therefore fundamental to the delivery of EPDs. With the advent of the European single market for construction products, the European Commission became concerned that national EPD schemes and building level assessment schemes would represent a barrier to trade across Europe.

The EU therefore sought a mandate from the EU Member States to develop European standards for the assessment of the sustainability performance of construction works and construction products. This mandate is called CEN/TC 350. From 2010 European Standards began to emerge from this process and Standard BS EN15804 was published in February 2012 providing core rules for construction product EPDs.

To manage this an ECO platform has been established. This consists of 18 European programme holders for EPDs, which must meet and agree each other's EPDs creating ECO approved EPDs, leading to a more accessible route to a pan-European market. The ECO platform is essentially a European umbrella for national EPD programme operators.

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The Standards and Legislation

Concept level	User and regulatory requirement					
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	Environmental Performance	Social Performance	Economic Performance	Technical Performance	Functional Performance	
Framework level	prEN 15643-1 Sustainability Assessment of Buildings - General Framework			Technical Characteristics	Functionality	
	prEN 15643-2 Framework for Environmental Performance	prEN 15643-3 Framework for Social Performance	prEN 15643-4 Framework for Economic Performance			
Building level	prEN 15978 Assessment of Environmental Performance	WI 015 Assessment of Social Performance	WI 017 Assessment of Economic Performance			
	WI 003 Use of EPDs					
Product level	prEN 15804 Environmental Product Declarations	See note below	See note below			
	prEN 15942 Comm. Format B-to-B	<i>Note: At present, technical information related to some aspects of social and economic performance are included under the provisions of prEN 15804 to form part of EPD</i>				
	CEN/TR 15941					

What are the options for companies?

- 1** Manufacturers can of course apply for their own EPDs. However, this process is expensive and time consuming, and at a time when most budgets and resources are limited it is not a practical option for most companies. Product groupings and the need to supply across different national markets can further prolong this process, leading to more expense for multiple or repeated EPDs.
- 2** The next option is to operate at a national level, working with member associations and national bodies. Over recent years this has been the clear route but with new European wide legislation coming to fruition this approach has limitations and can lead to unnecessary duplication of work, in order to maintain relevance across different countries.
- 3** The growth in EU legislation and the ratification of various national standards, would suggest that a Europe level approach is the most sensible option. This is where ARGE believes it can play a crucial role. As a European Federation, ARGE are in the unprecedented position of being able to draw together the policies and workings at a national level to create and apply for a European wide standard, something that in turn will benefit our members and their members.

ARGE plan to introduce entry level EPDs for all its members...

At ARGE we are keen to take a lead on the sustainability agenda and it is our mission to create European wide EPDs for products that are accessible to the national Federations and Associations in each country, and through them to their individual members.

This creates a harmonised approach across Europe, at a lower cost thanks to collective funding and shared EPDs. In addition, the generic and standard European-wide EPDs will be developed at a faster rate and provide a quicker route to market for members of national associations.

To ensure all members are up to date on the benefits EPDs can bring, as well as the wider implications of the sustainability agenda, ARGE aims to act as the central information hub for the latest news and market information.

Further Reading/Appendix/Glossary

Visit www.arge.org for all European wide sustainability issues for the lock and hardware market.

Conclusion

Remember, changes are happening – the question “if” sustainability will affect our members now becomes “when”.

As an industry it is vital that we understand and engage in the sustainability agenda, and ARGE is uniquely well placed to deliver this.

Acting as a central reference point for all our members and their manufacturing members, ARGE can not only help members gain a greater understanding of the core issues involved but also provide access to EPDs, which will become fundamental to providing access routes to market.

Join the debate, have your say and learn more by visiting the ARGE website, where you can access the forum and speak with other members keen to get involved with the sustainability agenda.



ARGE

www.arge.org