

Ensuring the EU Renovation Wave is Social and Circular

1. Introduction

RREUSE is pleased to provide comments to the ongoing consultation¹ on the EU Renovation Wave Initiative. There exist significant opportunities for environmental improvement and job creation opportunities linked to this initiative which must be tied directly to EU social and circular priorities in order to maximise EU impact. This briefing highlights a number of ways in which the Renovation Wave can reinforce the EU's Circular Economy Action Plan, Implementation of the EU Pillar of Social Rights as becoming an important element of a future Social Economy Action Plan.

It provides a snapshot selection of experiences from RREUSE members and social enterprises from its wider network working in the field of construction, demolition and management of the built environment focussed on re-use.

2. Repurposing, re-use and refurbishment vs. demolition and reconstruction

The concept of re-use can be applied in different contexts when applied to renovation. In short, the re-use of buildings and building components, that preserves their physical integrity (i.e. not material recycling); provides significant material and carbon savings in comparison to constructing / renovating building stock using virgin materials.

Fundamentally, renovation rather than demolition and reconstruction should be the preferred strategy, both for the environment and job creation. One excellent example is the repurposing of a public boiler house in Ireland, initially planned for demolition, into a centre of excellence for the circular economy through the support of EU Life+ funding. The lead partner was the Rediscovery Centre, a social enterprise based in Ballymun, Dublin. The project not only 're-used' the building itself, but also used the latest sustainable materials and energy / water savings systems to showcase a low-carbon, low impact and material efficient building.

Example: Life+ Wiser Project, Ireland

Total budget 3,622,245.00 € / EU contribution 1,802,407.00 €

Repurposing, rather than demolishing a public Boiler house resulted in significant environmental savings: *The buildings reconstruction reused approximately 17.5 t of main steel structure, 3.5 t of ancillary steel structure, 260 t of concrete slab structure, and reused 281 t of construction and*

¹<https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12376-Commission-Communication-Renovation-wave-initiative-for-the-building-sector/public-consultation>

demolition waste. The reuse of the existing structures resulted in an avoidance of approximately 55 t of embodied carbon, based purely on production impact.

On a socio-economic side and community side, the Boiler House now centralises the Rediscovery Centre's multiple circular activities and acts as a hub for the community and visitors to the area from across Greater Dublin, Ireland and the EU. In addition, over 30 exhibitions at the Rediscovery Centre were developed and installed during the project to encourage interaction and active learning, a trail was established to take visitors on a tour of the building to highlight key points of interest, and the cafe is very popular with the local community. Over 60 targeted life-long learning programmes were developed to further strategic goals of national waste policy. During the lifetime of the project, over 30 000 people participated in RDC programmes²

3. Re-using building components in renovation

Increasingly, social enterprises are involved in activities related to selective removal of building components prior to demolition in a bid to preserve their integrity to be used directly in refurbishment of other buildings. A recent study for the Italian Ministry Environment³, carried out by the builders cooperative CMB, highlighted significant opportunities for resource savings and job creation through different forms of circular activities applied to construction and demolition activities.

The study found that selective disassembly and preparation for re-use model of buildings provides substantial benefits, especially from the perspective of people, workers. Creation of new social enterprises with subsequent creation of local wealth and jobs in the area of new services linked to the circular economy with connections to eco-design and re-use. Innovative collaborations were highlighted in particular between social enterprises organized in networks together with construction enterprises, designers, architects and builders. A typology of the possible items that can be suitable for re-use include radiators, floors (tiles and parquets) window frames and so forth. But the study points to the fact that intervention is needed to stimulate demand for these products and services in order to scale up what are currently seen as 'niche activities'.

A great example of such a collaboration in the field of building component re-use is that of the multi-award-winning Baukarussel project in Austria.

Example: Baukarussel Project, Austria

The Baukarussel project is an Austrian cooperation initiative that addresses the re-use of buildings on a large scale. In cooperation with property developers and architects, re-useable components of buildings are dismantled and made available for direct re-use. The work itself is carried out by workers from social enterprises many of whom are disadvantaged in some way, through which they learn new skills and trades making them more employable on the open labour market.

²https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=4953

³ https://www.mise.gov.it/images/stories/documenti/allegati/coop/SF_Recupero_ScartiEdilizia.pdf

One initiative of Baukarussell, focussed on selective dismantling and re-use of building components from an old bottling plant, managed to divert 1% of the demolition mass primarily through re-use. Based on a rough extrapolation of the results, it is estimated that diverting 10% of demolition mass in Austria through re-use, would not only save on resources but also employ 9,000 people.

Getting the legal framework right to push these activities forward and make significant carbon and material savings under the Renovation wave is key. One good way to start to ensure re-useable building components are re-used is through mandatory pre-demolition audits such as those imposed for demolitions over a certain threshold size, such as the case of Austria:

Example: Austrian law for mandatory pre-demolition audits

Austria's recycling-construction material ordinance BGBl. II Nr. 181/2015, amended by BGBl. II Nr. 290/2016⁴ prescribes pre-demolition audits on different levels depending on the type of demolition:

- big: > 3.500 m³ (cubic-meters of building volume = volume of space surrounded by the building, not volume of the material alone!) - comprehensive pre-demolition audit according to a national norm (ONR 192130) by certified experts.
- medium (< 3.500 m³ and > 750 tonnes of construction waste): "orienting audit" by a professional person.
- small: (< 3.500 m³ and < 750 tonnes of construction waste): no audit
- Both audits must contain information/documentation about potentially re-useable parts.

Another key aspect to ensure building carbon savings of the future is to ensure that buildings are designed to be easily disassembled and rebuilt. The German association Bauteilnetz estimate that 80% of building components and materials were re-useable coming from buildings built pre- 1900 whilst now it is only a fraction at maybe 10%, with differences between residential and industrial buildings. The International Resource Panel states that products should be designed with multiple uses in mind and recognises, for example, that it should be possible to design steel rods and beams used in construction so that they can be disassembled, collected, reconditioned and certified for re-use in new buildings⁵. Therefore, when new buildings are designed, design for modularity is key.

The renovation wave initiative therefore has the potential to reinforce circular and social objectives.

4. Other forms of circular building materials

Beyond directly re-using building components, a number of social enterprises are involved in creating building materials from recycled products, including thermal insulation such as Metisse in France or Acoustix-PanTerre in Belgium.

⁴ <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20009212>

⁵ <https://www.resourcepanel.org/reports/mineral-resource-governance-21st-century>

Example: Métisse circular insulation, France

Métisse⁶ is one example of a socially and environmentally produced insulation material made from cotton jeans which can no longer be re-used. They can be used in both thermal and acoustic applications and are produced by French social enterprise Le Relais. It is a form of recycled material produced by an organisation who is primarily oriented to collect, sort and sell used goods for re-use. Those which it cannot re-use, it looks to produce recycled materials locally. Le Relais is a network of social enterprises in France focussed on the integration of individuals at risk of social exclusion through sustainable and circular activities. The social enterprises making up the network provide jobs to over 2,000 individuals across the territory of France, especially in the field of textile re-use and recycling.

Example: Acoustix-PanTerre, Belgium

Acoustix-PanTerre panels are made out of a carefully thought mix of recycled textiles and paper. The panels have been developed by the social enterprise Terre one of the pioneers of the collection of textile and paper in Wallonia (South Belgium) to find an answer to the increasing amount of textile and paper unsuitable for reuse/recycling. The panels are produced in five different models with different thermal and acoustic performance <https://www.acoustix.be/produits/acoustix-pan-terre/>. Terre, created in 1963, federates several social enterprises employing some 300 workers most of which from disadvantaged groups.

Another example of an interesting way in which the circular economy can be introduced into the renovation wave is by encouraging the re-use and remanufacturing of paint:

Example: Community Repaint schemes

A [European Commission survey](#) highlights that 'over 300 million litres of paints are sold annually in the UK to the DIY market and to trade operators. Approximately 37.5 million litres of DIY and 2.5 million litres of trade paint remain unused. This paint tends to be stored and then disposed to landfill. The collection and re-use of surplus paint is highly desirable as the disposal of such unused products is a loss of valuable resource and can create nuisance when mixed with municipal waste. There now exist a number of community paint re-use schemes in Europe, ensuring that good quality unused paint can get a new lease of life and be sold to community groups for a low price. Some social enterprises are even 'remanufacturing' old paint to create a new equivalent for a variety of applications.

Support for the separate collection of paint could provide greater support for the development of further schemes and encourage jobs locally. For more information about community repaint schemes, initially trialled and implemented in the UK, see [here](#).

⁶ <http://www.isolantmetisse.com/>

As a final example of how upcycling can be incorporated to prolong product and material lifespans without destroying their integrity, such as the Leuven City Shelf:

Example: Leuven City Cutting Board and building materials bank⁷

Social Atelier, a Belgian based social enterprise, is creating cutting boards from recycled rubber wood from a former wine cabinet from De Hoorn in Leuven. The initiative is part of an urban mining programme where they are now building a 'building materials bank' for the first time in the city. The materials bank warehouse stores recovered building components that can be purchased for renovation

5. Concluding Remarks and Suggestions:

The Renovation Wave Initiative has the potential to be fantastic tool to inspire the development of large scale circular and socially inclusive activities, involving social enterprise. Examples such as those mentioned in this briefing must serve as an inspiration to demonstrate to Member States how they can maximise social and environmental impact of their renovation actions through using circular products and materials as well as cooperation with social enterprises. Scaling re-use as a key component of these examples through encouraging new partnerships, funding and innovation is a must.

RREUSE is currently working on more elaborated suggestions, some further general points to support a more social and circular renovation wave include:

- Green and Social Procurement: Inclusion of mandatory social clauses in procurement contracts for products and services concerning the renovation of buildings would significantly support the role of social enterprise in the field of renovation and provide significant environmental and social value to tenders. These could include, for example, giving extra points to a bid from an organisation employing significant numbers of employees from disadvantaged backgrounds (at least 30%). For more examples of how social clauses can be set see here
- Focus on creating incentives for the re-use of buildings and building components, for example through circular quantitative targets, potentially linked to the EU Waste Framework Directive. Setting targets for this sector is likely to send a strong signal to those who design buildings and provide further support to new and innovative activities in the field of construction and demolition material re-use.
- Support mandatory pre-demolition audits as those used in Austria
- Create fiscal incentives for the direct use of re-useable building components in a refurbishment operation as well as new materials which are circular, for example through a favourable tax and VAT regimes (0% or heavily reduced)
- Encouragement of circular building design

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About us:

[RREUSE](#) is an international network representing **social enterprises active in re-use, repair and recycling**. RREUSE members divert around **1 million tonnes of goods and materials** on an annual basis from landfill¹.

In 2018, RREUSE members active in re-use **extended the lifespan of 214 500 tonnes of products**, counterbalancing the average CO2 emissions of approximately 108 000 EU citizens.

Environmental services, including those of re-use and repair, enabled **850 social enterprises** federated by RREUSE's wider network to fulfil their social mission, which for the most part includes the provision of work opportunities, training and support services for disadvantaged individuals. There are approximately **95,000 employees, volunteers and trainees** engaged in the activities of RREUSE members.