FSC® is the sustainable choice for construction projects

A guide to sustainable public procurement for construction
Why go for (FSC-certified) wood in construction?

Because it is environmentally and socially responsible.

Provided it is produced in a sustainable manner, increasing the wood component in a building reduces its environmental impact throughout its lifecycle. In particular, it can help to reduce greenhouse gas emissions.

However, deforestation and forest degradation are still a reality today. Illegal logging and unsustainable forest practices undermine the environmental and social benefits of using wood. That is why certification of wood is so important and effective, particularly if done with the FSC global certification scheme.

Is this a task for public authorities?

Indeed it is.

In the EU, the public authorities together spend around 18% of GDP on procuring works, goods and services, making procurement a powerful tool to stimulate and mainstream sustainable production and consumption patterns.

Is it difficult?

It does not have to be. FSC-certified timber is competitive and widely available.

However, to prevent ‘greenwashing,’ you, as the buyer, need to play a role in ensuring that you make a responsible choice. FSC has verification procedures that allow the end buyer to play a role. This publication is a guide to sustainable public procurement for construction. It also describes how FSC provides solutions, and as an organization, is ready to help.

Wood and construction

Wood is a wonderful building material: beautiful to look at, easy to work with, renewable, recyclable, carbon-efficient, low-energy, and high-performing.

Increasing the use of wood in construction can reduce the environmental footprint of a building upfront, during its lifetime, and at the end of it.

Environmental benefits

One important element is the climate impact of wood compared to other materials, such as concrete and steel.

Concrete and steel dominate the global market in construction materials. Yet, producing steel is 24 times as energy-intensive as producing wood, while concrete can emit 0.14 tons of carbon dioxide (CO2) per cubic meter produced. By contrast, timber absorbs about 0.9 tons of CO2 per cubic meter, storing the carbon for the duration of its lifespan. As this carbon store of harvested timber remains stable while more trees are grown to replace those that have been harvested, a net carbon reduction is achieved.

The net CO2 emissions of different building materials vary greatly during their life cycle. Whereas wood-based construction materials - such as timber, plywood, particle boards and hardboards - absorb carbon, mineral-based construction materials - like gypsum board, limestone and red bricks - and metal-based construction materials - such as steel plates and rolls, steel I-beams and aluminum façade elements - cause significant carbon emissions during their life cycle.

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And because wood can often be recycled, there is good potential for extending the duration of its carbon sequestration capacity. For these reasons, wood can help businesses in the construction industry to comply with the many environmental regulations they face.

In addition, the residues of many petroleum based plastics are environmental pollutants. By contrast, residues from the forest and wood industry do not pollute the environment and can themselves be re-used as raw materials or renewable fuel. As more forests are managed responsibly, the long term availability of wood can be ensured.

Wood has the best thermal insulation properties of any mainstream construction material: five times better than concrete, ten times better than brick, and 350 times better than steel. A 2.5 cm timber board has greater thermal resistance than an 11.4 cm brick wall. With building legislation increasingly requiring improved thermal efficiency and lower energy consumption, using wood is a simple and long-lasting way to comply with the rules and improve performance through the lifetime of a building.

Wood is a versatile natural material: FSC-certified wood is used in more than 400 product groups worldwide. With thousands of FSC-certified wood products and species to choose from, there is always an option to meet construction or design needs.

Wood is also believed to create a healthy environment. Research has shown that wood buildings and interiors are perceived as warm, relaxing, comforting, and welcoming.

However, the positive environmental impacts can be undone if the wood comes from harvesting practices that degrade or destroy forests. Unsustainable forestry practices undermine biodiversity, deplete soils, contaminate water and cause carbon emissions. The carbon storage component of timber can only be counted if one is sure that new trees replace the harvested ones.

And there is more: after commercial fishing and military service, timber and logging work is globally regarded as the third most dangerous job. Training, equipment and safety measures are essential. Moreover, in some parts of the world, logging practices undermine the livelihoods of forest-dependent people, and where they are illegal, also undermine the rule of law, foster corruption and deplete tax incomes.

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Public procurement is a great tool to deliver benefits and prevent negative impacts

In the coming years, the demand for forest products will increase because of population and prosperity growth, increased demand for bio-energy, and the emergence of the bio-based economy (replacing oil as resource for plastics). This makes it even more important to promote sustainable forest management through responsible purchasing.

The opportunities for public authorities

Public authorities can make a difference: if they systematically require the maximum use of wood in construction, restoration and (re)furbishment. If they also include the requirement of certification of such wood in technical specifications, they contribute to reducing climate change and maintaining biodiversity as well as social and economic progress in the harvesting regions.

Around the world, many public procurement policies make certification a pre-requisite for selecting suppliers of construction materials. FSC certification also helps to implement the EU commitment to prevent the use of illegally harvested wood.
The role of architects, designers and construction engineers

Using more wood is only part of reducing the environmental footprint of a building. The choice of architect, by you or the construction firm, also needs to be guided by their experience with, or a convincing interest in, sustainable construction. Within that bigger picture, it is of course crucial that architects realize the big difference in wood from sustainable and non-sustainable production. It is also important that the focus not be exclusive to specific (often well-known) timber species, but on the need for quality and performance (strength, colour, durability) so that, where necessary, alternatives – including lesser known species – can be considered options for sustainable production reasons. For advice from FSC, see www.lesserknowntimberspecies.com.
FSC: From a good idea to a global market tool

As the world’s most trusted forest certification system, FSC ensures wood products come from forests managed to keep them intact and healthy, unlocking benefits across the entire supply chain.

Established in 1993, FSC is an independent, non-governmental organization that has developed into a global scheme currently including over 200 million hectares, or 16.1% of all production forests in the world, and involving more than 140,000 forest managers and 60,000 businesses active in the supply chains. In the EU, 27% of productive forests are FSC-certified and green public procurement schemes in several countries profit from the presence of almost 16,000 FSC-certified production and trade organizations.

The FSC scheme is based on permanent, balanced multi-stakeholder decision-making, monitoring and evaluation. Environmental and social organizations, trade unions and representatives of Indigenous Peoples have a strong say, while small and large economic operators feel their interests are taken into account as well. The result is a system based on robust principles and criteria for forest management, adapted to national circumstances; tested rules for businesses active in the supply chain; and third-party verification of the performance of certificate holders by professional organizations controlled by a unique specialized global accreditation organization.

FSC is the only forest certification supported by the most trusted environmental organizations, such as the Worldwide Fund for Nature, and global businesses. While it is the preferred scheme for most of the environmental movement globally, that movement keeps us sharp by pointing out alleged weaknesses and abuse. Legal protection of our logos, in addition to a complaint procedure, address these. The leading global green building promotion scheme Leadership in Energy and Environmental Design (LEED), uses FSC certification as the minimum requirement for wood (www.usgbc.org/international).

4 Source: FAO’s “Global Forest Resources Assessment 2015”, page 3, assumes that 31% of all forests in the world “were primarily designated as production forests. All forests were 3.999 million ha. at that time.
Special FSC rules for the construction sector

If you ask for sustainably-sourced timber products you want to feel confident that you can rely on the evidence, because you want to make a difference. And for FSC, credibility is essential for its existence. That is the reason why the entire chain, from forest to consumer, is controlled. All businesses in the chain are FSC-certified and audited by accredited certification bodies. This chain is called the FSC chain of custody.

In the construction sector, the contractor and relevant sub-contractors (except installers) also must be FSC certified. Alternatively, contractors must apply FSC project certification. This is needed to ensure they know FSC’s rules and have the system in place to separate FSC-certified from non-FSC materials in their workshops and yards. Only then can you trust that you will get what you want.

It is important that public authorities make it clear from the start that they expect sustainably-sourced building materials to be used by certified businesses to ensure compliance. Public authorities can easily check the validity of certificates that bidders refer to via the publicly available FSC database (http://info.fsc.org/), which shows you whether a certificate is valid and for which kinds of products and/or services.

Owner: Hoogheemraadschap Rijnland.
Constructor (CoC-certified): Gebr. v/d Poel BV.
FSC project certification is project and site specific. It can be used for virtually any type of new build or refurbishment project, and for permanent or temporary structures. FSC certified construction projects include, for example, the London 2012 Athletes’ Village (now residential development East Village) and WWF’s Living Planet Centre in the UK. It enables contractors to make a single claim regarding the total FSC-certified raw material input to the whole project.

How to include sustainable forest management in tenders for construction

The new EU directives on public procurement, published on 28 February 2014, increase the scope for green and sustainable public procurement. Requirements for sustainable production can now, besides in award criteria, also form part of the technical specifications. It is allowed to require labels/certificates, such as FSC, as evidence, as long as equivalent evidence should also be accepted. The EU rules apply for public works contracts of a minimum of EUR5,186,000. For smaller projects, only national rules are relevant, but the EU rules are often used as a basis.

In the technical specifications, you could start by mentioning that you have a specific ambition/minimum level for the use of wood in the project concerned, in terms of the percentage of materials (construction wood, floors, ceilings, wall coverings, furniture etc.). You can clarify that this is because of the relatively favourable ecological footprint of this material, provided it is based on sustainable harvesting. For that reason, you require from the tenderers a commitment to work exclusively with timber from sustainable sourcing.

You then need to specify what you mean by sustainable sourcing. One option is to quote the FSC Principles & Criteria (FSC-STD-01-001 Version 5) which you can find at https://ic.fsc.org/en/document-center/id/59, and require evidence of compliance through FSC certification or equivalent evidence. There are other approaches as well, as clarified for example in the Buying Sustainable Timber guide (see www.sustainable-timber-action.org/).

It is important to specify that, where contractors refer to FSC certification, they need to be FSC-certified or acquire such certification (on a permanent basis or specifically for the project concerned), and ensure relevant sub-contractors have, or will have, the same certification as well.

6 For more information about the new EU rules and how they relate to FSC certification see: https://ic.fsc.org/en/choosing-fsc/public-procurement
The value-add of certification

FSC-certified local wood products can be comparable or even less expensive than the same non-certified products sold elsewhere. When there is a price difference it is often only marginal.

Price differences do also occur given illegal and/or unsustainable logging. Higher prices for FSC timber typically occur in direct competition with forest operations where more trees than permitted or ecologically acceptable are cut down, taxes are evaded, Indigenous Peoples’ rights are ignored, workers are underpaid and their safety is neglected.
Following up the tender

For a reliable outcome it is important to work with contractors that have FSC certification. Every FSC-certified business has a unique certification number that you can easily find on the FSC database (http://info.fsc.org/), as well as information about whether the certificate is valid and covers the kind of products/works you are looking for.

If this is not the case, and there are no alternatives, you can discuss with the contractor to go for FSC certification. FSC has several options for this: single chain of custody certification, multi-site certification for large businesses with several sites, group certification for small businesses (including subcontractors), and project certification. FSC project certification is project and site-specific. It can be used for any type of new build or refurbishment project, and for permanent or temporary structures. Depending on the size of the business, a certification process can be completed within one or two months. National FSC offices are ready to help you to get this started.

Your role, however, is not over then: to be confident about the use of FSC-certified wood in the project, it is essential to confirm that the certified contractor includes claims concerning the materials/products used in the project in his delivery documents.

Finally, there are rules concerning the communication of the FSC nature of the construction project. These rules exist to protect the credibility of FSC and thereby play a role in the further expansion of sustainable forest management in the world. A certified contractor knows how and under what conditions he can physically label a building as FSC-certified as well as the related communication rights of the owner. The owner of the building can also decide whether or not to promote the building as FSC-certified and, if so, needs a trademark agreement with FSC (through the national or regional FSC trademark service providers).
The Netherlands – pioneering in construction certification

In 2005, the Netherlands started an ambitious green public procurement policy, aiming for 100% green public procurement for the national government by 2010, and for all governmental levels by 2015. It set up a support framework to assist public purchasers.

In 2011, two environmental organizations investigated the practice. They learnt that, by then, only 10% of public purchasers had chosen certified contractors for construction projects. This gave a clear signal to FSC Netherlands and the two organizations to launch a major campaign to, on the one hand, convince construction firms to seek FSC certification http://www.fsc.nl/bouw.594.htm, and, on the other, mobilize and advise public authorities to focus on FSC-certified contractors.

Both were successful and the increased demand from authorities came as important motive for companies to respond. The number of certified construction firms in the Netherlands increased from 50 in 2008 to more than 1100 in 2018. And 35% of public authorities work with certified companies.

In some cases, authorities – such as the municipalities of Leeuwarden, Heerlen, Wymbritseradeel and the local water-board - worked together to be more effective in stimulating the market. As a result, the province of Friesland has a relatively high number of certified construction firms nowadays.
Resources

Danish
• Byg med FSC www.fsc.dk/byg

Dutch
• Meldpunt werken met gecertificeerde bedrijven
• Borging opdrachtgevers http://www.fsc.nl/borging-opdrachtgevers.590.htm
• Impact van uw project meten: http://www.fsc.nl/nl-nl/fsc/impact/impacttool
• Impact van FSC op circulair bouwen en klimaat: http://www.fsc.nl/nl-nl/fsc/impact
• Handleiding Bouwen met FSC hout - van beleid tot realisatie http://www.fsc.be/nl-be/documenten/fsc-folders-rapporten

English
• Tropical wood: Introducing lesser known species www.fsc.dk/lesserknown
• FSC Project Certification http://www.fsc-uk.org/download.projectcertification-factsheet.49.pdf
• Specifying FSC Certified Timber http://www.fsc-uk.org/download.architectsand-timber-specifiers-factsheet.34.pdf

French
• Construire avec du bois FSC - De la conception à la réalisation

German
• ÖffentlicheBeschaffung https://www.fsc-deutschland.de/de-de/zertifizierung/ffentliche-beschaffung

Italian
• Sustainable Timber Action in Europe http://it.fsc.org/sustainable-timber-action.33.htm
• Green Public Procurement (GPP) per la Pubblica Amministrazione
  https://it.fsc.org/it-it/servizi/corsi-di-formazione/green-public-procurement-per-la-pubblica-amministrazione

The Role of FSC in Sustainable Public Procurement
FSC has a dedicated web-page for public procurers, including practical information and advice regarding the benefits of FSC certification for, how procurement requirements can be formulated within legal constraints, how to deal with life-cycle assessment requirements, etc. This brochure can be found there. https://ic.fsc.org/en/choosing-fsc/public-procurement

FSC Benefits for Business
The FSC Benefits for Business web page is a useful resource to show the value of FSC certification, with sector-specific information, case studies from leading companies, fun facts, infographics, examples of impacts and much more. http://benefitsforbusiness.fsc.org/

FSC certificate search
The FSC certificate search facility is a database that derives wholly from the original data of certificate holders administered by FSC. Search options include by company, products, species, country, FSC code and status (valid or suspended). http://info.fsc.org/index.php
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<td>FSC Belgium</td>
<td><a href="http://www.fsc.be">www.fsc.be</a></td>
<td>Interleuvenlaan 62 bus 28, 3001 Heverlee, Belgium</td>
</tr>
<tr>
<td>FSC Finland</td>
<td><a href="http://www.fi.fsc.org">www.fi.fsc.org</a></td>
<td>Kuortaneenkatu 1, 00520 Helsinki, Finland</td>
</tr>
<tr>
<td>FSC Netherlands</td>
<td><a href="http://www.fsc.nl">www.fsc.nl</a></td>
<td>Wilhelminapark 37, 3581 NJ Utrecht, Netherlands</td>
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<tr>
<td>FSC Czech Republic</td>
<td><a href="http://www.czechfsc.cz">www.czechfsc.cz</a></td>
<td>Kounicova 42, 602 Brno, Czech Republic</td>
</tr>
<tr>
<td>FSC France</td>
<td><a href="http://www.fr.fsc.org">www.fr.fsc.org</a></td>
<td>5 Rue de Bernus, 56000 Vannes, France</td>
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<td>FSC Luxembourg</td>
<td><a href="http://www.lu.fsc.org">www.lu.fsc.org</a></td>
<td>Oekozenter Pafendal 6, rue Vauban 2663 Luxembourg</td>
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<td>FSC Denmark</td>
<td><a href="http://www.dk.fsc.org">www.dk.fsc.org</a></td>
<td>Ferdinand Sallings Straede 13, 3.8000 Aarhus C, Denmark</td>
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<tr>
<td>FSC Germany</td>
<td><a href="http://www.fsc-deutschland.de">www.fsc-deutschland.de</a></td>
<td>Merzhauser Str. 183, 79100 Freiburg, Germany</td>
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<td>FSC Poland</td>
<td><a href="http://www.fsc.pl">www.fsc.pl</a></td>
<td>Lumen Building Zlote Tarasy, ul. Zlota 59 00-120 Warsaw, Poland</td>
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<td>FSC Switzerland</td>
<td><a href="http://www.fsc-schweiz.ch">www.fsc-schweiz.ch</a></td>
<td>Neustadtgasse 9,8400 Winterthur, Switzerland</td>
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<tr>
<td>FSC across the Baltics</td>
<td><a href="http://www.ee.fsc.org">www.ee.fsc.org</a></td>
<td>Kastani 42, 50410 Tartu Estonia</td>
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<tr>
<td>FSC Italy</td>
<td><a href="http://www.it.fsc.org">www.it.fsc.org</a></td>
<td>Via Ugo Foscolo, 12, 35131 Padua (PD) Italy</td>
</tr>
<tr>
<td>FSC Portugal</td>
<td><a href="http://www.pt.fsc.org">www.pt.fsc.org</a></td>
<td>Rua Mestre de Lima Freitas n.º 1, 1549-012 Lissboa, Portugal</td>
</tr>
<tr>
<td>FSC United Kingdom</td>
<td><a href="http://www.fsc-uk.org">www.fsc-uk.org</a></td>
<td>The Billiard Room Town Hall, Great Oak Street, Llanidloes, Powys, SY18 6BN</td>
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