

## **Copenhagen Lessons**

10 principles to build on

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Dignity and agency for all people is fundamental in architecture, there is no beauty in exclusion.

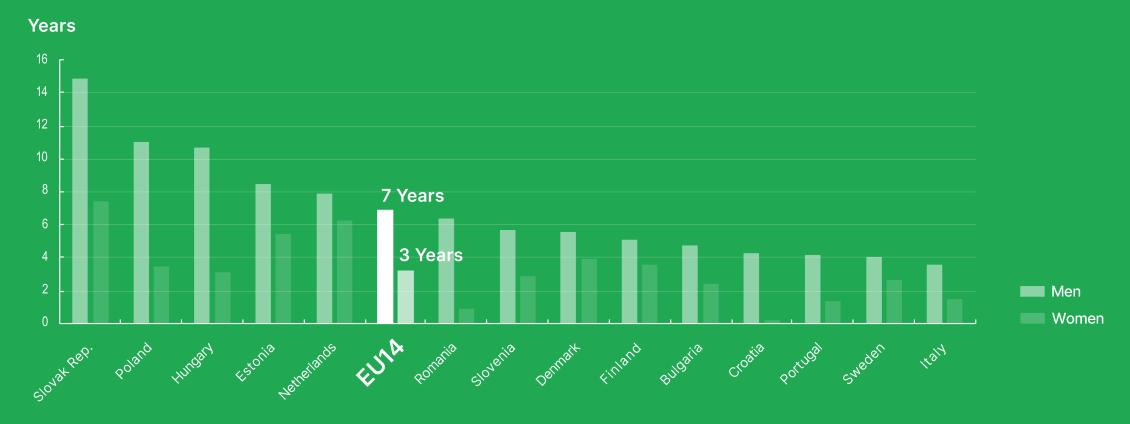


People at risk of being left behind must be accommodated first when we construct, plan, and develop the built environment.



### Inequalities in life expectancy

Gap in life expectancy at age 30 between people with the highest and lowest level of education, 2017 (or nearest year)



**Description:** Life expectancy measures the average number of remaining years of life for people at age 30 based on current mortality conditions. Education level is based on the ISCED 2011 classification. The lowest education level refers to people who have not completed their secondary education (ISCED 2011 0-2). The highest education level refers to people who have completed a tertiary education (ISCED 2011 5-8).

Note: The EU average is unweighted.

**Source:** Eurostat Database, complemented with data from Statistics Netherlands for the Netherlands by the OECD

Societal gain by moving 1% of individuals with disabilities in Denmark from early retirement to a job (in DKK over 10 years)

# 4 Billion DKK Flexjob Ordinary

**14 Billion DKK** 

job

**Source:** COWI. (2021). Samfundsøkonomiske gevinster ved flere personer med handicap i beskæftigelse.

Existing built structures must always be reused first.



### GLF Predicted lifespan of buildings based on construction period

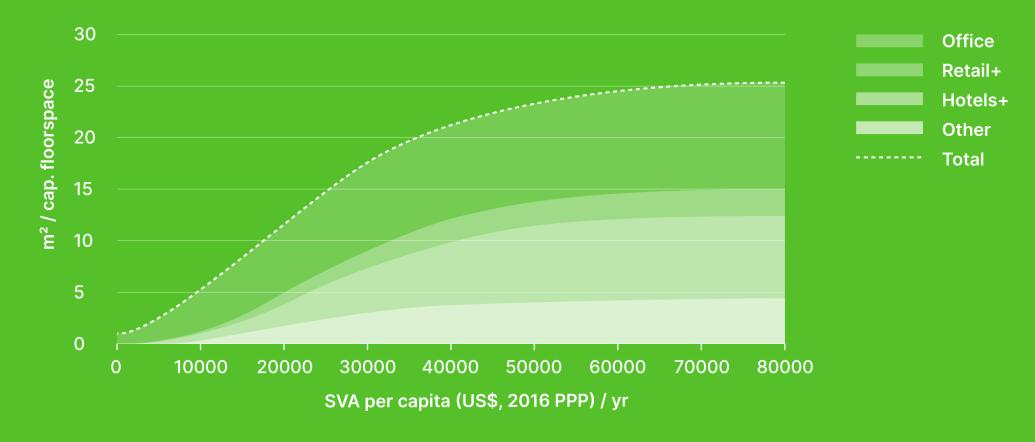


**Source:** Andersen, A., Negendahl, K. (2023). Lifespan prediction of existing building typologies. Journal of Building Engineering.

No new development must erase green fields.

### Floor space demand at different income levels

Service-related



**Source:** Deetman etal. (2020). Modelling global material stocks and flows for residential and service sector buildings towards 2050. Journal of Cleaner Production. Volume 245. **Description:** Development of per capita service-related floor space stock at different levels of affluence (expressed as the per capita Service Value Added per year, in 2016 US dollars, at Purchasing Power Parity).

Naturel ecosystems and food production must be sustained regardless of the built context.

### Biggest perceived risks to global society as of 2022

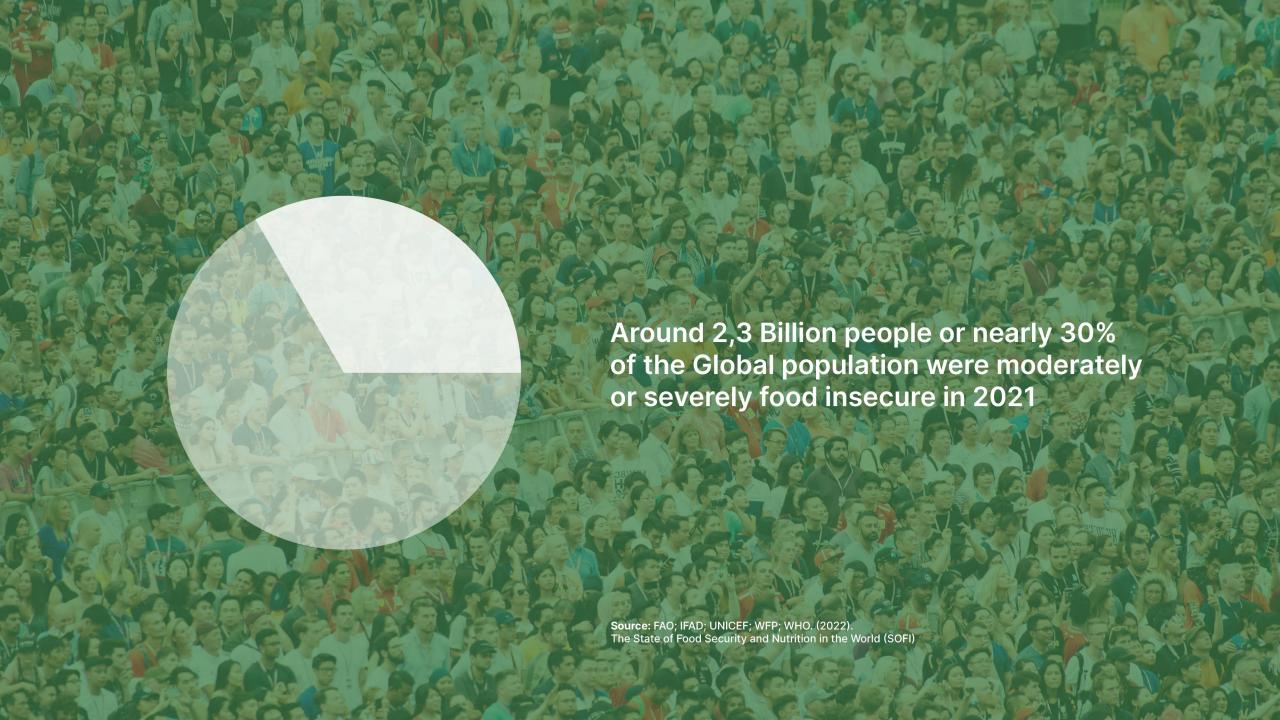
By long-term severity



**Description:** Failure to mitigate climate change was ranked as the biggest risk to the world, based on a long-term severity index. Respondents around the globe gave the afore mentioned risk an average severity index of almost 5.9 points, being seven the score of highest severity and a score of one the lowest. Furthermore, biodiversity loss and ecosystem collapse got a score of 5.55 points, while natural disasters and extreme weather got 5.76 points.

Notes: Worldwide, 7 September to 5 October 2022; 999 respondents; Long term threats: 10 years scale\* (1-low severity, 7 high severity)

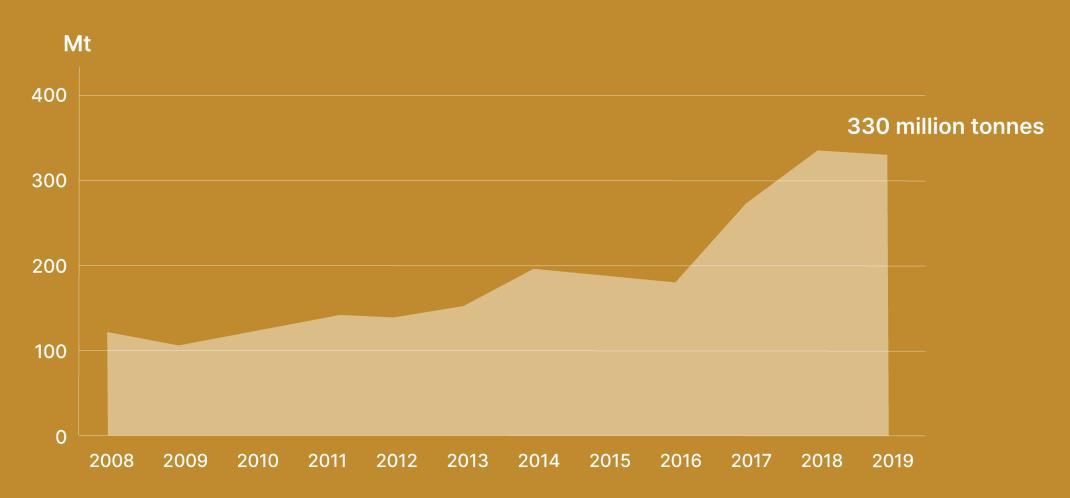
Source(s): World Economic Forum



No virgin mineral material must be used in construction when reuse is possible.

### **Demand for Sand**

Global annual industrial sand and gravel extraction (in million tonnes)

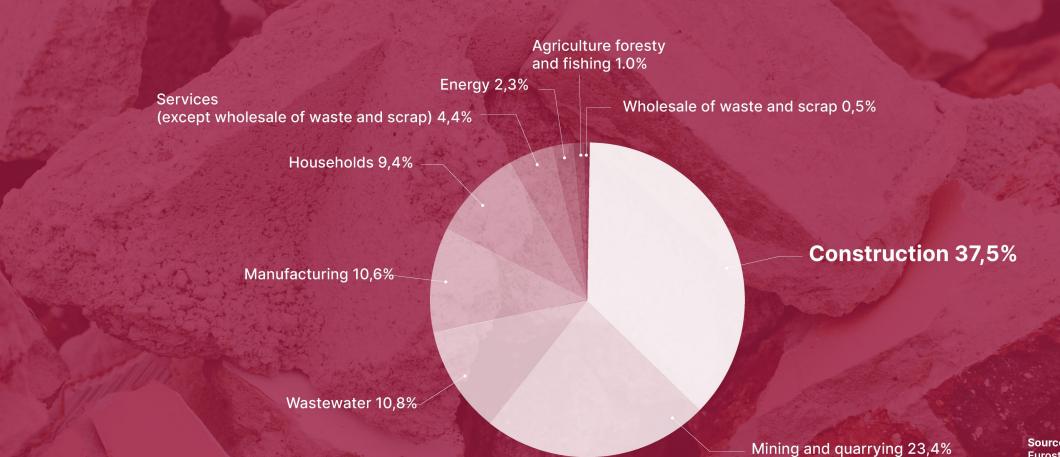


**Source:** United States Geological Survey (2019)

No waste must be produced or left behind in construction.

### Waste generation by economic activities and households, EU, 2020

(% share of total waste)



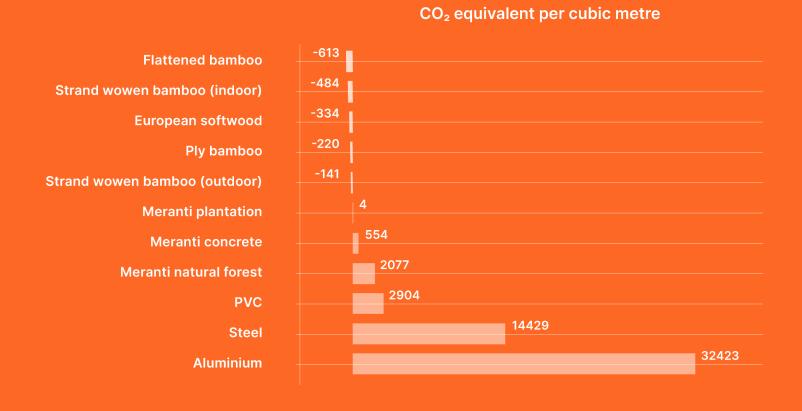
Source: Eurostat (online data code anv\_wasgen)

When sourcing materials for construction, local renewable materials come first.



### Lifecycle carbon footprint of common building materials

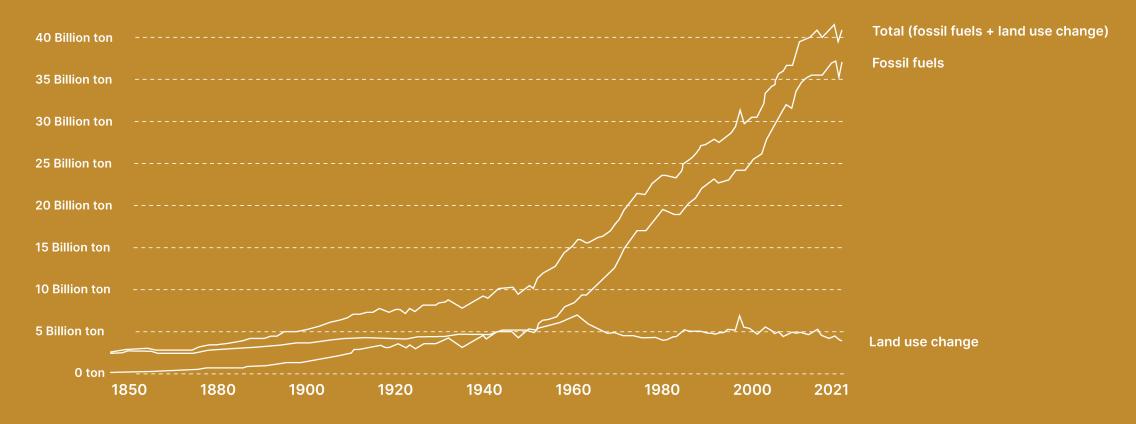
CO<sub>2</sub> equivalent per cubic metre



Data: Van der Lugt and Vogtländer (2015)

In everything we build, carbon capture must exceed carbon footprint.

### Global CO<sub>2</sub> emissions from fossil fuels and land use change (World)



**Source:** Our World in Data based on the Global Carbon Project (2023) OurWorldInData.org/ Co2-and-greenhouse-gas-emissions • CC BY

When developing, planning, and constructing the built environment, every activity must have a positive impact on water ecosystems and clean water supply.

Only 40% of surface water bodies are standing in good ecological status and only 35% in good chemical status

Source: European Environment Agency. (2023)

"Industrial pollutant releases to water in Europe.



# Let's act now and create the change we need











