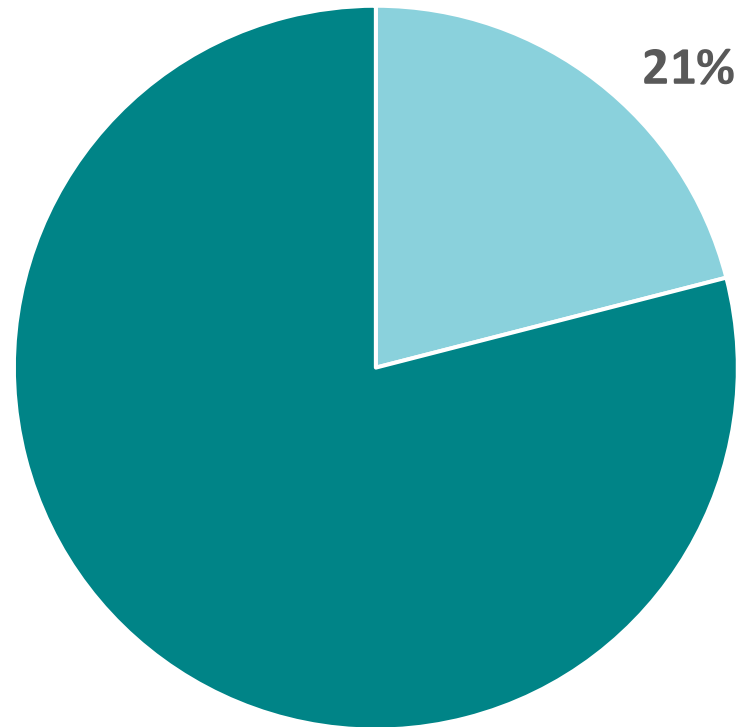




# Interpretation of building contractors' climate calculations for buildings

Åsa Thrysin  
2023-11-09

# The construction and real estate sector accounts for one-fifth of Sweden's national greenhouse gas emissions



Boverket, 2021. Utsläpp av växthusgaser från bygg- och fastighetssektorn. Available at: <https://www.boverket.se/sv/byggande/hallbart-byggande-och-forvaltning/miljoindikatorer---aktuell-status/vaxthusgaser/>

# Fossil-Free Sweden

- Roadmap for the construction and infrastructure sector's goals:

2030: 50% reduced greenhouse gas emissions (compared to 2015)

2040: 75% reduced greenhouse gas emissions (compared to 2015)

2045: Net zero greenhouse gas emissions



# Different Climate Impact Requirements in the Construction and Real Estate Sector

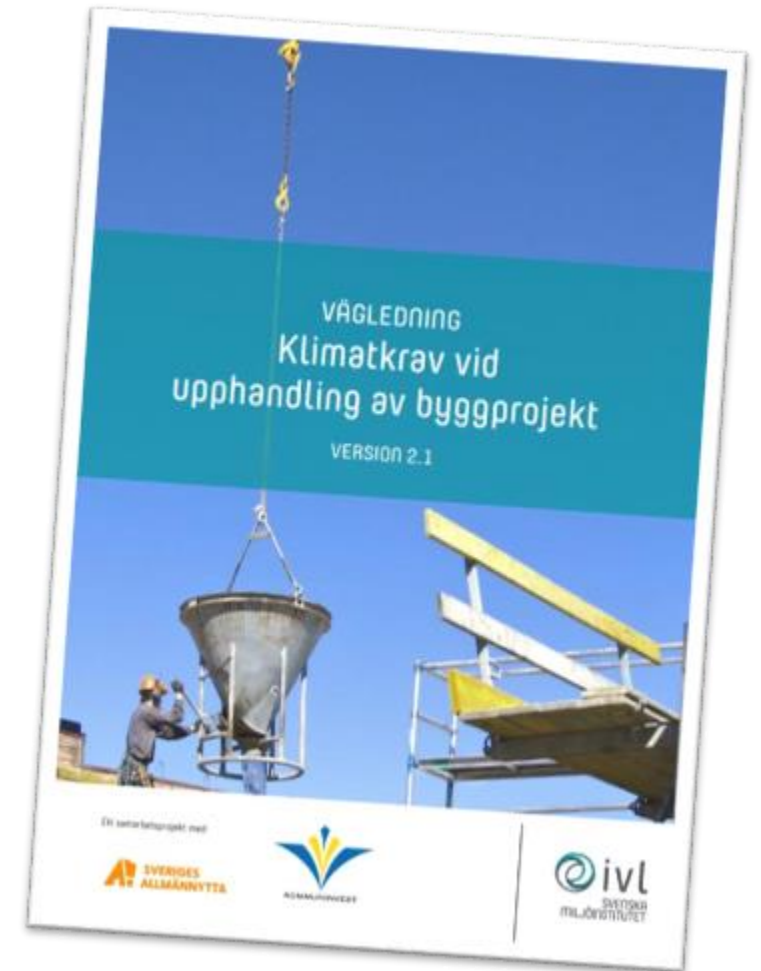
- The law on climate declarations for buildings
- Environmental certification systems for buildings
- EU Taxonomy
- Local industry initiatives, e.g., LFM30
- Company-specific objectives and requirements

## Clarification:

Climate calculation/declaration in the construction sector = LCA with regard to climate impact



To achieve these requirements, climate requirements are needed during procurement.



When you have your calculations  
– What do you do then?



# Reviewing a Climate Calculation/Declaration

Check the following:

- Reported documents and results
- Method and input data
- Plausibility of the results

Suggested review checklist can be found in the procurement guide

from IVL\*

\* <https://www.klimatkravtillrimligkostnad.se/>

## 5.1 Checklista för granskning

Nedan följer guidning och förslag på kontrollpunkter som kan genomföras vid granskning av en klimatberäkning.

### Övergripande kontroll av redovisade handlingar

**Övergripande redovisning:** De handlingar som lämnas in behöver omfatta specifika delar för att en granskning ska vara möjlig. Dessa delar bör man ha kommit överens om i projektkraven och redovisning kan exempel innebära följande:

Kontrollpunkt	
Beräkningsrapport med beskrivning av metod, beräkningens omfattning, indata och redovisning av resultat	
Resurssammanställning som beräkningen är baserad på samt tillhörande beskrivning i hur den tagits fram.	
Beskrivning av byggprojektet.	

### Övergripande kontroll av redovisat resultat

**Redovisning av resultat:** Kontrollera att det beräknade resultatet är redovisat i korrekt enhet (t.ex. kg CO<sub>2</sub>e och kg CO<sub>2</sub>e/BTA) samt att resultatet är uppdelat enligt projektkrav. Exempel på relevant redovisning och uppdelning:

# Real world example

Adda Central Purchasing Body

Framework Agreement for Preschool Buildings 2018



# Framework Agreement for Preschool Buildings 2018

- The procurement took place before the climate declaration law was decided or came into force.
- Its purpose was to promote the development of more climate calculations.
- Provide procuring authorities with transparent information about the climate performance of buildings.



# Requirements

- Calculation of climate impact must be done for the building's construction phase.
- No requirements for climate calculation of the operational and final phase.
  - Instead, separate requirements on energy consumption, airtightness, etc.
- At least 50% of the calculated climate impact from the structure and foundation must be based on product-specific climate data from environmental product declarations (EPDs).
- Deliver a report and a filled-out result file in Excel.
- Follow IVL's guidelines for climate calculations (guidelines 1-4, 7-11, and 14)\*.



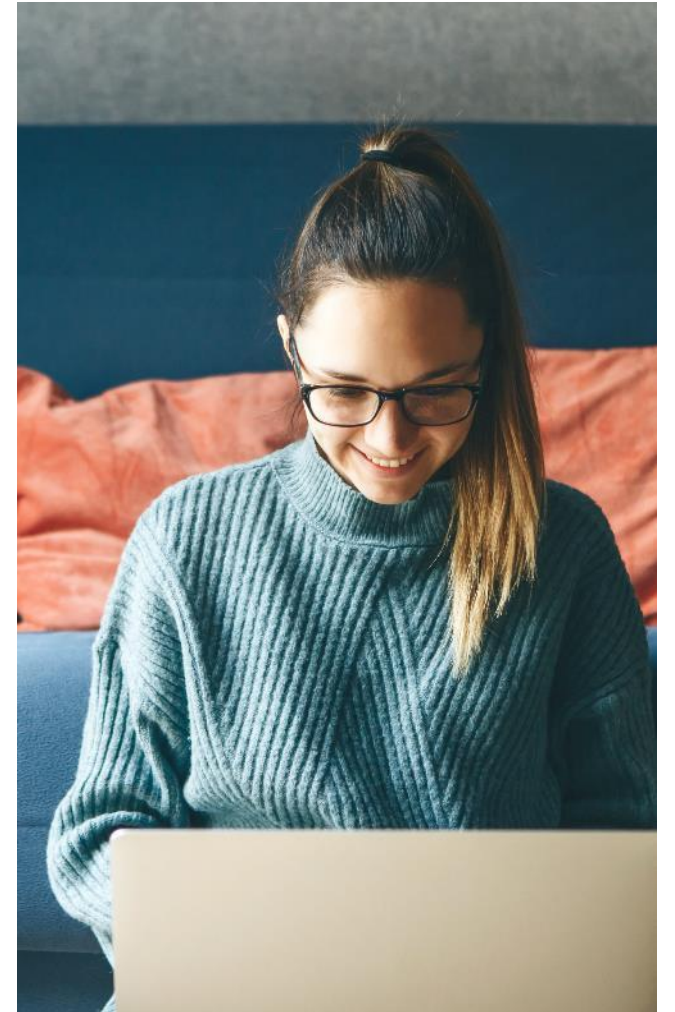
\* <https://www.klimatkravtillrimligkostnad.se/>



# Interpreting Results

Keep in mind that...

- Climate calculations try to reflect a complex reality.
- It is difficult to fully describe the climate impact in all details, which exact numbers in a result presentation can make it seem.
- The result helps identify where the greatest potential lies to reduce the climate impact.



# Final Words

Keep in mind when procuring...

- consider how the results should be reviewed.
- set requirements for how it should be reported, including the underlying data (not just the results)
- a common results template can be helpful so that everyone reports in the same way.



Thank You!