

Living Places - Jernbanebyen

Planet report

18.03.2026



Outline People

Due to Nicole Di Santos work with the report:

Living Places

Active House Radar – Evaluation of Comfort, Energy and Environment

The results for the People category are not presented in this report. They are instead summarized at the end as part of the overall results.



Outline Planet

Energy

- Assumptions
- Requirements
- Results

CO₂ Emissions

- Assumptions
- Requirements
- Results

Biodiversity loss

- Assumptions
- Requirements
- Results





Assumptions

Energy - Planet

Assumptions – Energy

This slide only presents some of the assumptions for the Energy calculation. For more details about the calculation please see the attached files for the Energy calculation on Children's Living Places.

General:

- *Calculated in Be18 (10.19.7.22)*
- *Calculated in accordance with the Danish Building Regulations BR18 and Danish building standards*
- *Quantities are based on floor plans, facade drawings and construction drawings and descriptions.*

Specific:

- *Thermal capacity for the CLP is assumed to be 30 Wh/K m^2 - which compares to a lightweight building.*
- *The building is both mechanic and naturally ventilated.*
- *The building is not mechanical cooled.*
- *Internal heat gains from occupants and equipment are calculated with the value of $1,5 \text{ W/m}^2$ for occupants and $3,5 \text{ W/m}^2$ for equipment.*
- *The heating system in the building is radiators with a supply/return temperature of $55/35 \text{ }^\circ\text{C}$*
- *Heating for the building is supplied by a heat pump with an COP at a value of 4.*
- *There's established $10,6 \text{ m}^2$ solar panels on the building*



Requirements

Energy - Planet

Energy

Requirements

Energy Score 1:	80 % of national requirements
Energy Score 2:	85 % of national requirements
Energy Score 3:	90 % of national requirements
Energy Score 4:	100 % of national requirements

The baseline is set at 30 kWh/m²,year + 1,000 kWh/year/heated floor area, according to Danish law for residential buildings.



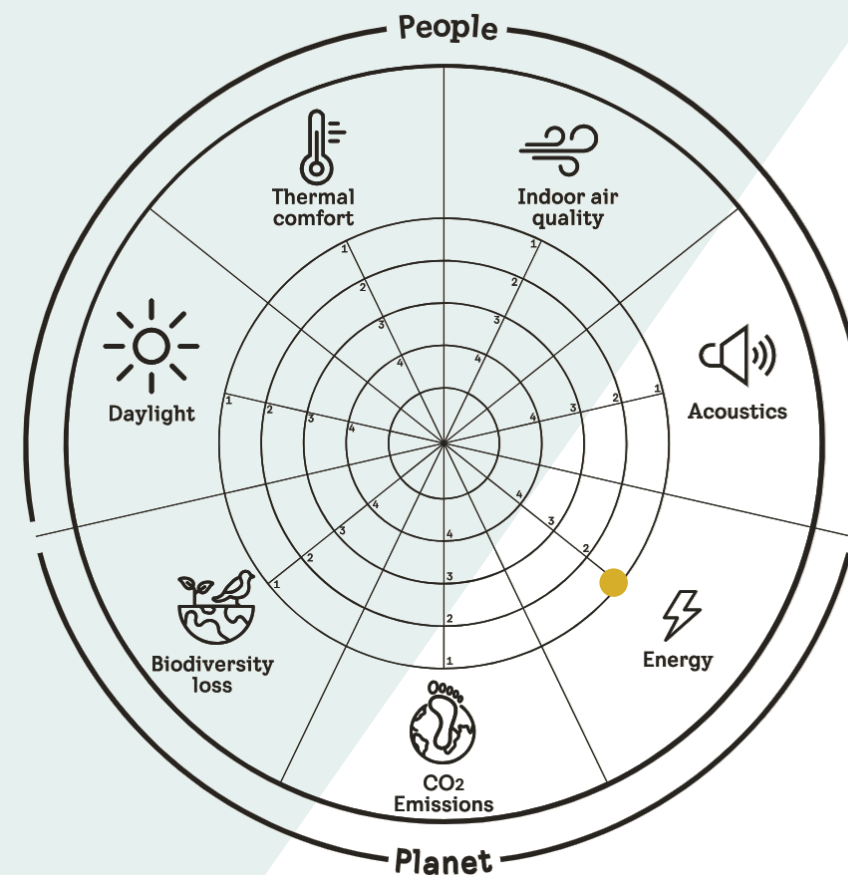
Results

Energy - Planet

Total results – Energy

Building	Energy demand [kWh/m2]	Score
Total	10,7	1,0

	80% national req.	85% national req.	90% national req.	100% national req.
Energy demand	29,4	31,3	33,1	36,8





Assumptions

CO₂ Emissions - Planet

Assumptions – CO₂ Emissions

This slide only presents some of the assumptions for the LCA calculation. For more details about the calculation please see the attached files for the LCA on Children's Living Places.

General:

- *Calculated in LCAByg 2023.3 (5.2.1.0)*
- *Calculated in accordance with the Danish Building Regulations BR18 and Danish building standards in 2023*
 - *Includes stages A1-A3, B4, B6, C3 and C4*
 - *Emission factors from BR18 (2023)*
- *The climate impact is reported in kg CO₂-equivalents per m² for an assessment period of 50 years from completion of the construction*
- *Quantities are based on floor plans, facade drawings and construction drawings and descriptions*

Specific:

- *The climate impact is based on generic data and several specific data, as following: Flooring, gypsum, insulation, solar panels, steel cladding, wooden plates, bitumen roofing, fiber cement board, pumps, radiators, skylights from Velux and wooden cladding.*
- *In this specific LCA screws and other fasteners are included in the calculation. This is a practice beyond what the building model describes in the Danish Building Regulations.*



Requirements

CO₂ Emissions - Planet

CO₂ Emissions

Requirements

- CO₂ Emission Score 1: ≤ Safe Operating space
- CO₂ Emission Score 2: ≤ Reduction pathway (using IPCC 50% probability scenario of staying below 1,5°C)
- CO₂ Emission Score 3: ≤ Reduction pathway (using IPCC 33% probability scenario of staying below 1,5°C)
- CO₂ Emission Score 4: ≤ Reduction pathway (using IPCC 17% probability scenario of staying below 1,5°C)

The baseline is set at 6,7 kg CO₂eq./m²/year, according to Danish law for residential buildings.

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
CO ₂ Emission Score 1:	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%
CO ₂ Emission Score 2:	100%	84%	68%	52%	36%	20%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%
CO ₂ Emission Score 3:	100%	89%	79%	68%	57%	47%	36%	25%	15%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%	≤ 4%
CO ₂ Emission Score 4:	100%	94%	87%	81%	74%	68%	62%	55%	49%	42%	36%	30%	23%	17%	10%	≤ 4%



Results

CO₂ Emissions - Planet

Total results – CO₂ Emissions

Building	GWP	Building year	Score
	[kg CO2 eq./m2/ year]	[year]	
Total	3,83	2023	2,0

	2025	2026	2027	2028	2029	2030	2031
CO ₂ Emission Score 1:	0,3	0,3	0,3	0,3	0,3	0,3	...
CO ₂ Emission Score 2:	6,7	5,6	4,6	3,5	2,4	1,3	...
CO ₂ Emission Score 3:	6,7	6,0	5,3	4,6	3,8	3,1	...
CO ₂ Emission Score 4:	6,7	6,3	5,8	5,4	5,0	4,6	...





Assumptions

Biodiversity loss - Planet

Assumptions – Biodiversity loss

This slide only presents some of the assumptions for the Biodiversity Loss. For more details about the calculation please see the attached files for the Biodiversity Loss on Children's Living Places.

General:

- *Quantities for the Biodiversity impact is based on the LCAByg file*
- *For the background data, the materials have been grouped according to the representative datasets accessible in Ecoinvent v.3.11*
- *The biodiversity impact related to energy consumption has been assessed, based on a dataset for the Ukrainian electricity consumption mix.*



Requirements

Biodiversity loss - Planet

Biodiversity loss

Requirements

Biodiversity loss Score 1:	100% of biodiversity loss is being actively recovered
Biodiversity loss Score 2:	Reaching 100% recovery by 2028
Biodiversity loss Score 3:	Reaching 100% recovery by 2030
Biodiversity loss Score 4:	Reaching 100% recovery by 2034

Scores depend on the percentage of biodiversity loss each project recovers and the patchway chosen to achieve it.

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Biodiversity loss Score 1:	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Biodiversity loss Score 2:	0%	17%	33%	50%	67%	83%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Biodiversity loss Score 3:	0%	11%	22%	33%	44%	56%	67%	78%	89%	100%	100%	100%	100%	100%	100%	100%
Biodiversity loss Score 4:	0%	7%	13%	20%	27%	33%	40%	47%	53%	60%	67%	73%	80%	87%	93%	100%



Results

Biodiversity loss - Planet

Total results – Biodiversity loss

Building	Biodiversity recovery [%]	Building year [year]	Score
Total	0	2023	2,0

	Operation	Material	Total	TDN [ha]
Results	1,31E-15	4,23E-14	4,36E-14	1
Percentage	3	97	100	-

	2025	2026	2027	2028	2029	2030	2031
Biodiversity loss Score 1:	100%	100%	100%	100%	100%	100%	...
Biodiversity loss Score 2:	0%	17%	33%	50%	67%	83%	...
Biodiversity loss Score 3:	0%	11%	22%	33%	44%	56%	...
Biodiversity loss Score 4:	0%	7%	13%	20%	27%	33%	...





Overall results

Overall Results

