



Dutch  
Green Building  
Council

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Deltaplan/ Paris Proof

# CRREM consultation

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From DGBC (Martin Mooij and Eefje Stutvoet)

To: CRREM

## Consultation input DGBC

### 5. Energy assessment methodology

CRREM changed the methodology with respect to the incorporation of onsite renewables (figure 23, hard to read, an example would help). Earlier it was the net energy consumption (supply from the grid minus exported energy), now it is about the energy demand, so on-site renewables are excluded.

We think the news approach will be more complicated and will have a negative impact on CO2 reduction, for some reasons.

- Renewable energy systems on buildings (mostly PV) are awarded in energy certificate. The EU EPBD will introduce MEPS (minim energy performance standards). Some countries already have or have of announced these MEPS (in the Netherlands C-label for offices by 2023 and A++/ +++ for every public and commercial building by 2050). On-site renewables are included in the energy performance methodologies and certificates/ labels.
- DGBC includes on-site renewable in the [WEii](#) (EUI) methodology, connected tot the Dutch Paris Proof ambition. We are promoting the EUI, but because of the upcoming EU EPBD-4 legislation certificates will remain. Therefore we introduced the [EnergyCompass](#), to steer on both the certificate and EUI. Without on-site renewables the relation between CRREM and certificate will decrease further and therefore much harder and costly for investors to comply with both.
- In the Netherlands investors ask for permission from the tenants to get the energy data from the metering companies for reporting purposes. Most likely in the future because of the EPBD-4, this exchange of data will be mandatory. With this data investors can report the net energy consumption

as was in CRREM and is in WEii. The electricity generation of the PV system is not and will not become public data and will be hard to obtain by an investor.

- The incentive to implement renewable energy system on buildings will reduce because of the new methodology. Of course, energy efficiency is still the starting point and deep renovations will be required to comply with CRREM, MEPS and Paris Proof, but at a certain point PV will be more cost effective and (embodied) energy effective. Next to this: on site renewables including storage in batteries close to the energy demand, will reduce the grid capacity. This is one of the big issues nowadays in the electrification and energy transition.

For our Paris Proof targets, we excluded the potential for renewables/ PV on buildings from the national renewable energy potential. This explains (next to some other differences, see below) why the CRREM figures are a bit higher now than our Paris Proof figures.

## m2

A harmonization of the m2 worldwide will be hard to achieve, next to the breakdown in asset classes. Sectors take different indicators. In the Netherlands 'gross m2' or BVO is used and 'usable area' (GO or Ag). We choose for to the last, because this indicator is in energy performance calculations and available from the national register of buildings, the [BAG](#). The 'gross internal area' is in between of these two options and [not known](#) in the Netherlands.

## Asset classes

We rather related asset classes to the energy consumption and function, instead of the location (high street, shopping center), but we understand this originates from GRESB and we have worked on a workaround for retail, that we shared with you.

### A.2.3 District heat

We are not sure how district heating will be calculated in the CRREM tool, which emission factor will be taken. We recognize the approach and we think it is useful to mention our methodology and experiences. We have received many comments by investors that by looking at the meter, district heating or collective system have become unattractive and they even reconsidered contract with the utilities. To give an example; a heat pump inside the building reduces the energy demand for heat by a factor 4 (COP), compared to the same heat pump on block level for a number of buildings. In dense areas (waste) heat, bio-energy or geothermal systems can be a good solution and we do not want to reject them indirectly because of the methodology.

In the second version of the [WEii protocol](#), we added a weighting factor for district heating (and cooling), a constant factor related to the average efficiency of heat pumps, to be sure the buildings with an individual heat pump and district heating across the country will have a level playing field and have the same energy demand. Otherwise, a building is an (not yet) renewable district heating system will get stranded earlier than the same building in a already 100% renewable heating system, because of external factors (heating

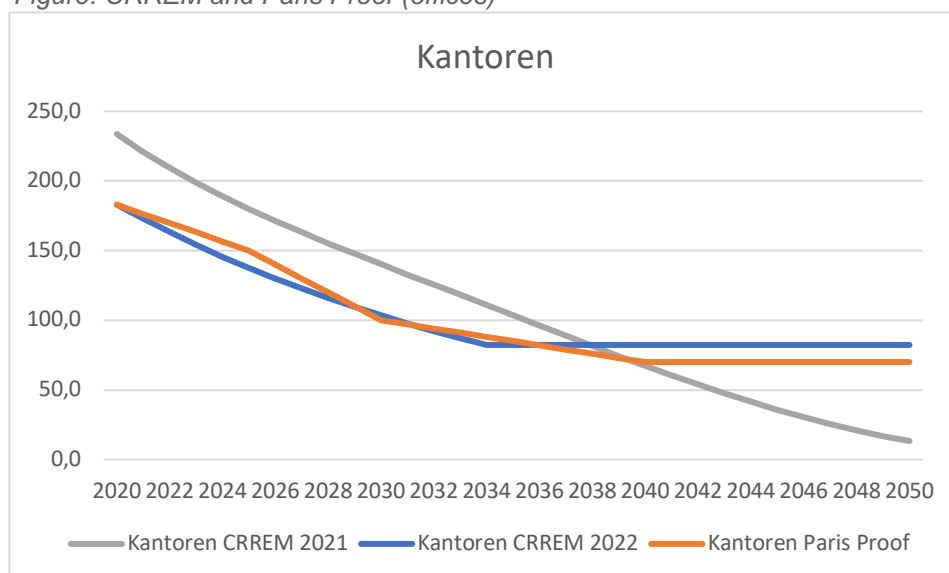
company). The rationale is that over the years, the efficiency factor for district heating will reduce to zero, like the emission factor for the electricity grid.

For reporting purposes, the actual emission factor of a particular district heating system can be used in our tool (as the emission factor for electricity in a particular reporting year).

### Methodology

The CRREM and Paris Proof pathways are very close now and almost overlapping. Differences can be explained because of the integration of on-site renewable and the m2. So the input data and the output are aligned, but it would be good to have a complete understanding of the methodology and calculations; the way the worldwide budget is broken down to real estate, the Netherlands, an asset type etc.

Figure: CRREM and Paris Proof (offices)



### Pathways

#### Homes

In the Netherlands the kWh/m2 do not differ very much for single and multi-family homes. CRREM chooses to set the ambition for MFH higher.