

Additional Information for Reference Emissions

Establishment and calculation of reference emissions

In the JCM, net emission reductions have to be ensured by setting reference emissions below BaU or setting project emissions higher than real project emissions by implementing the project. In order to establish the above reference emissions, air conditioning system market of Vietnam was investigated through interviews, on-sight surveys and specification documents.

1) Setting of Reference COP

Figure 1 shows the COP of the air conditioning systems of single-split type and non-inverter type ($\geq 14\text{kW}$) which are currently available in the Vietnam market based on the following reasons.

- According to BSRIA report(*1), over 97% of the air conditioning system distributed in Vietnam is the single-split type
- Almost all the single-split air conditioning systems are non-inverter type based on the survey through interviews.

The values of COP are obtained from product catalogs, specification documents or website, hearing survey of major manufacturers in Vietnam.

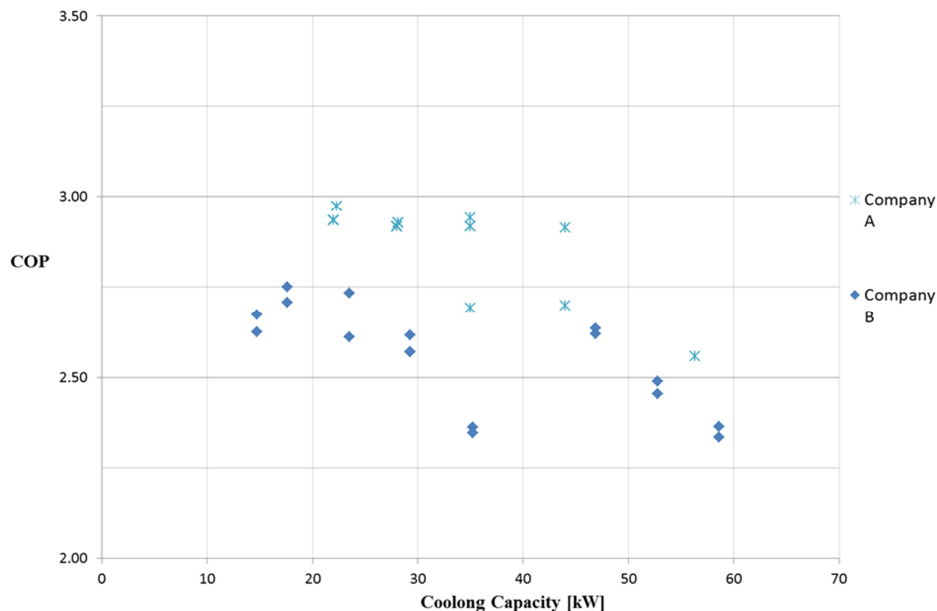


Figure 1: COP of single-split type Air Conditioning Systems (14kW to 150 kW) in the Vietnam Market

Source: Data quoted from official specification documents websites and Hearings with enterprises (2015)

¹ Data quoted from official specification documents websites and Hearings with enterprises (2015), Packaged and central plant market by % volume, 2014

The COP of reference air conditioning system is conservatively set *ex ante* in the following manner to determine reference emissions shown in Table 1.

- The reference COP, at a certain cooling capacity, is set at a maximum value in the respective cooling capacity range.

Table 1: COP for Reference Air Conditioning System (COP_{RE})

Cooling Capacity [kW]	Reference COP
$14 \leq x < 28$	2.97
$28 \leq x < 42$	2.94
$42 \leq x < 56$	2.91
$56 \leq x$	2.56

Source: Data quoted from official specification documents websites and Hearings with enterprises (2015)