

The Road to Net Reductions through the JCM

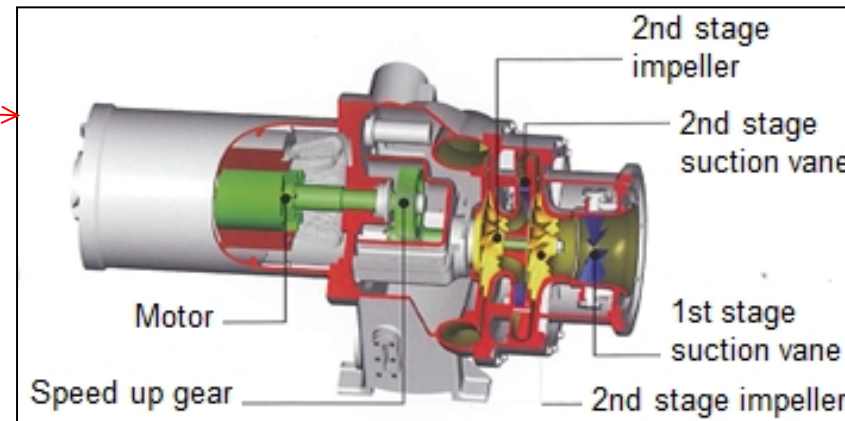
December 2014

Yuji Mizuno

Ministry of the Environment, Japan

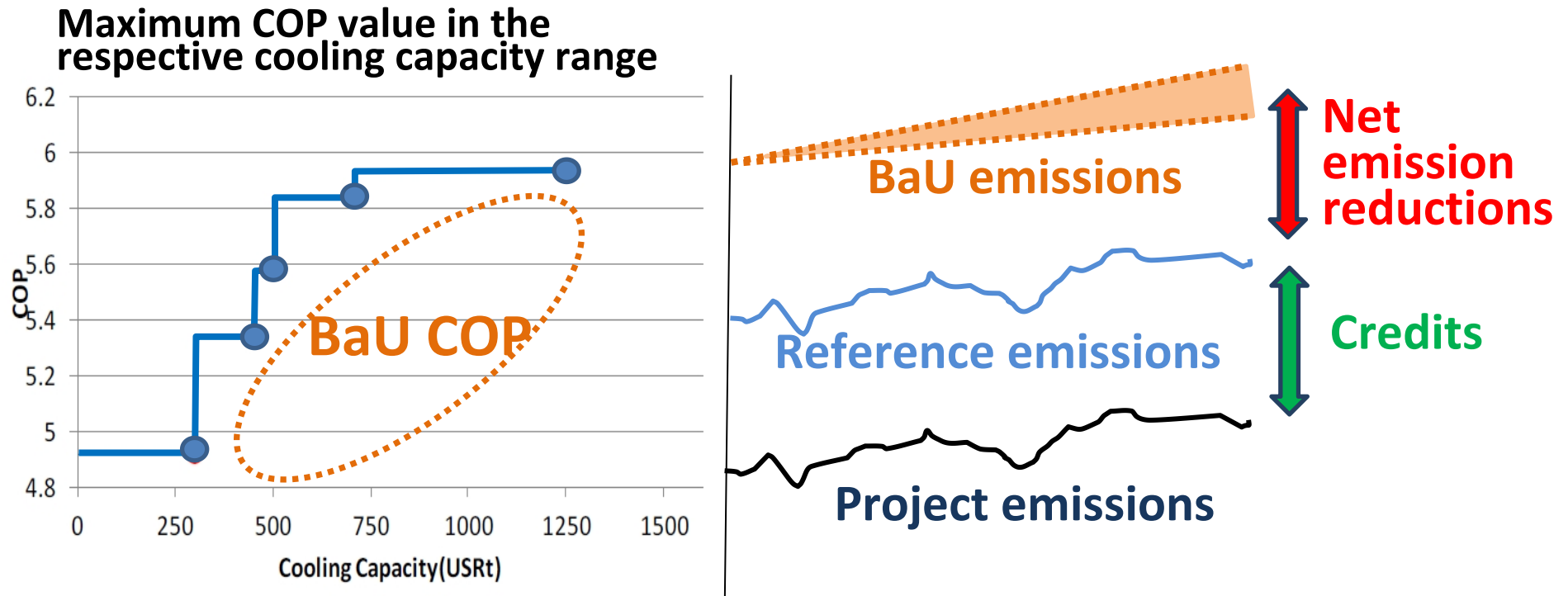
Methodology for High Efficiency Centrifugal Chiller (1/2)

- High efficiency centrifugal chiller for the factories:
 - ✓ COP more than 6.0



The reference emissions are calculated based on **the reference COP** conservatively set as a default value. The default value is set by taking **maximum COP of commercially available chillers** in the respective cooling capacity range.

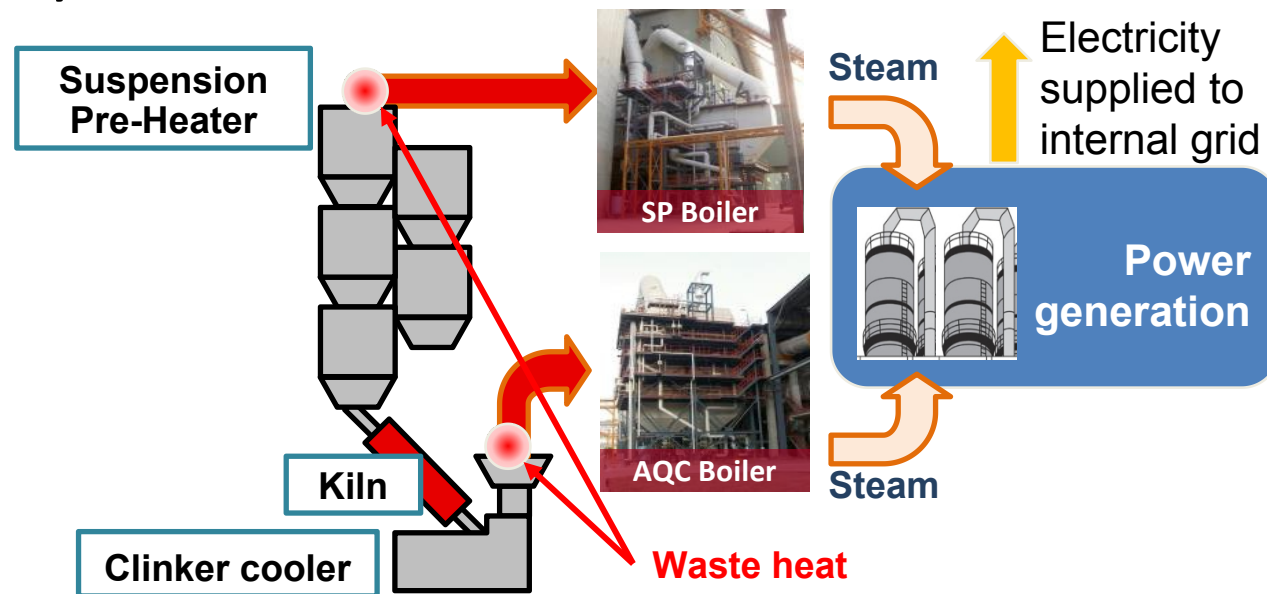
Methodology for High Efficiency Centrifugal Chiller (2/2)



- Monitoring is simplified as only a single parameter is to be monitored:
 - ✓ Power consumption of project chiller

Methodology for Power Generation by Waste Heat Recovery in Cement Industry (1/2)

- The project utilizes waste heat from the cement production facility by waste heat recovery (WHR) system to generate electricity.



The net amount of electricity supplied to the grid

= The gross amount of electricity generated by the WHR

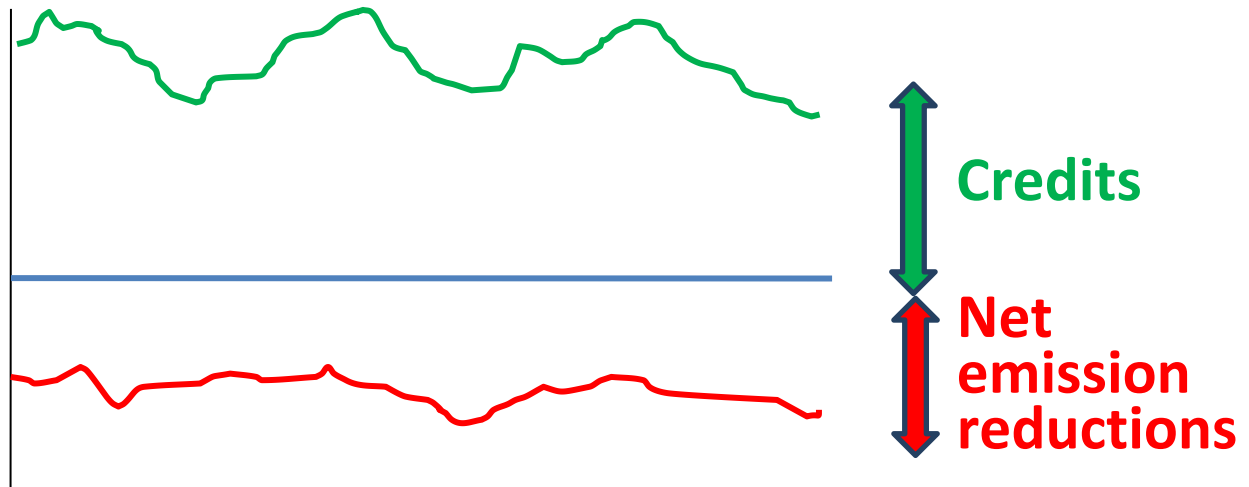
minus The electricity consumed for captive use

- The default value for electricity consumed for captive use is set as the **maximum rated capacity** of equipment of the WHR system assuming their operation is **24h/day**.

The gross amount of electricity generated by the WHR

Default value used for captive use

The electricity consumed for captive use



- Monitoring is simplified as only two parameters are to be monitored:
 - ✓ The quantity of the electricity supplied from the WHR system to the cement production facility
 - ✓ The number of days during a monitoring period