



ATMO sphere

Business Case for
Natural Refrigerants

04/09/2018 – Singapore





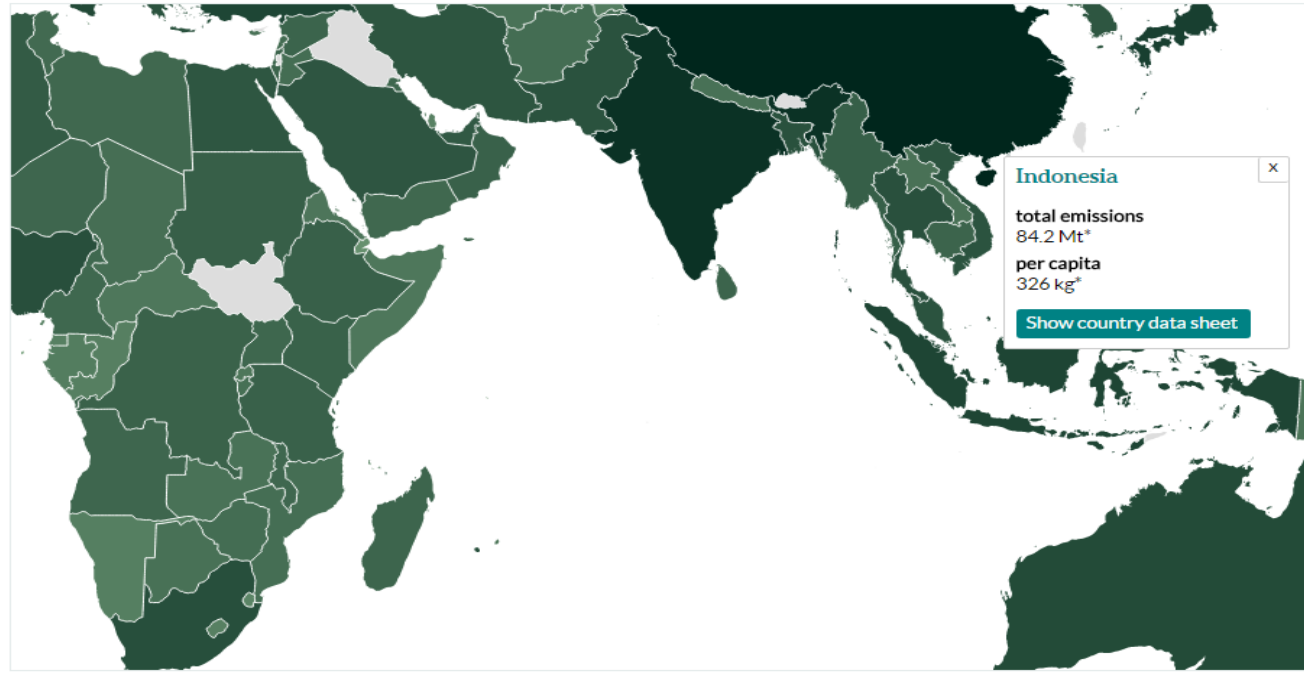
CAPACITY DEVELOPMENT ON HC REFRIGERANT
APPLICATIONS IN INDONESIA

Herlin Herlianika

Total emissions of cooling sector

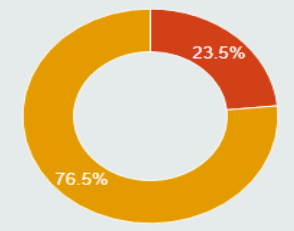
All sectors Absolute

+ | -

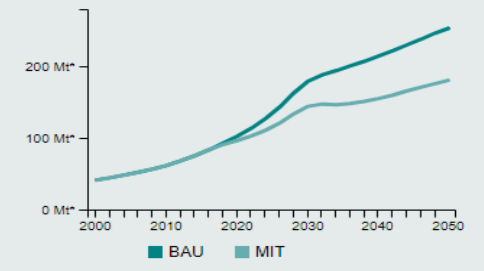


Indonesia

Total emissions
84.2 Mt*



■ direct emissions ■ indirect emissions



* in CO₂ equivalents
BAU = Business as usual
MIT = Mitigation scenario



INTRODUCTION

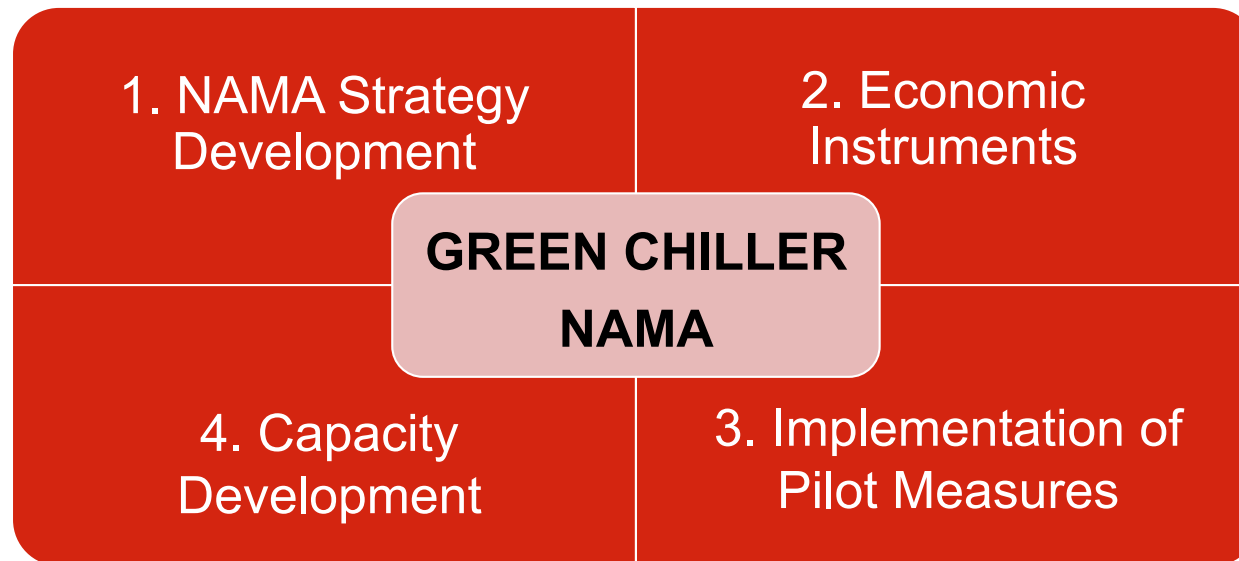
Green Chiller NAMA Project

NAMA development in the efficient air conditioning and process cooling supply sector in Indonesian industry and commerce.

Objectives:

The air conditioning and process cooling supply NAMA significantly contributes to the achievement of the Indonesian GHG mitigation target.

Green Chiller Indonesia Project Focus areas



National Standard Development Supported by Green Chiller Project:

In 2018 Indonesia through National Standards Agency (BSN) has approved 3 SNI that will support uses of energy efficient systems in the cooling sector.

- ***SNI 817:2018 on Refrigerant:*** Names and classifications
An identical copy of ***ISO 817:2014***
- ***SNI 6500:2018 on Fix Installation Refrigeration System:***
Safe and environmental friendly use of flammable refrigerants.
It is a revision of SNI 6500:2000 with ***EN 378*** as reference.
- ***SNI 8476:2018 on Performance Testing and Evaluation Method:***
Testing and evaluation method of chillers.
Reference: ***AS NZS 4776:2008*** and ***ARI 550/590***



National Professional Certification on HC Safe Handling

To ensure that technicians have knowledge, skill and good attitude when safe handling environmental friendly flammable refrigerants, Indonesia already has a national certification scheme for refrigeration and air conditioning technicians.

This certification is coordinated by the National Professional Certification Agency (***Badan Nasional Sertifikasi Profesi/BNSP***) through professional certification institutes (***Lembaga Sertifikasi Profesi/LSP***) as the authorized certification institute under national law.

National Professional Certification on HC Safe Handling (Cont'd..)

Bandung State Polytechnic and Bali State Polytechnic are the authorized certification institutes that have comprehensive HC equipment and facilities to implement such training and certification for technicians.

The polytechnics adopted the training materials to their curricula that were developed by the Green Chillers NAMA Project. So, their graduated students will automatically get the competencies on handling flammable refrigerants that comply to SNI 6500-2018 and EN 378. The students can directly be assessed to be certified.



National Professional Certification on HC Safe Handling (Cont'd..)

In 2018, Indonesia will have minimum of 150 certified technicians on safe handling of environment friendly and flammable refrigerant with D3 Refrigeration and Air Conditioning Engineering.





BNSP encourages related association for establishing more Authorized Professional Certification Institutes to give opportunities to the technicians having this safe handling environmental friendly flammable refrigerants certificate.



ATMO
sphere

Thank you for listening!

