How water utilities can contribute to climate mitigation solutions

Water and Wastewater Companies for Climate Mitigation

WaCCliM

Stockholm World Water Week 2017
27 August 2017

Agenda

1. Setting the scene
2. Launch of the ECAM Tool
3. ECAM used in the WaCCliM pilots
4. Round Tables
5. Panel discussion

The WaCCliM Project

Astrid Michels, GIZ

Water and Wastewater Companies for Climate Mitigation

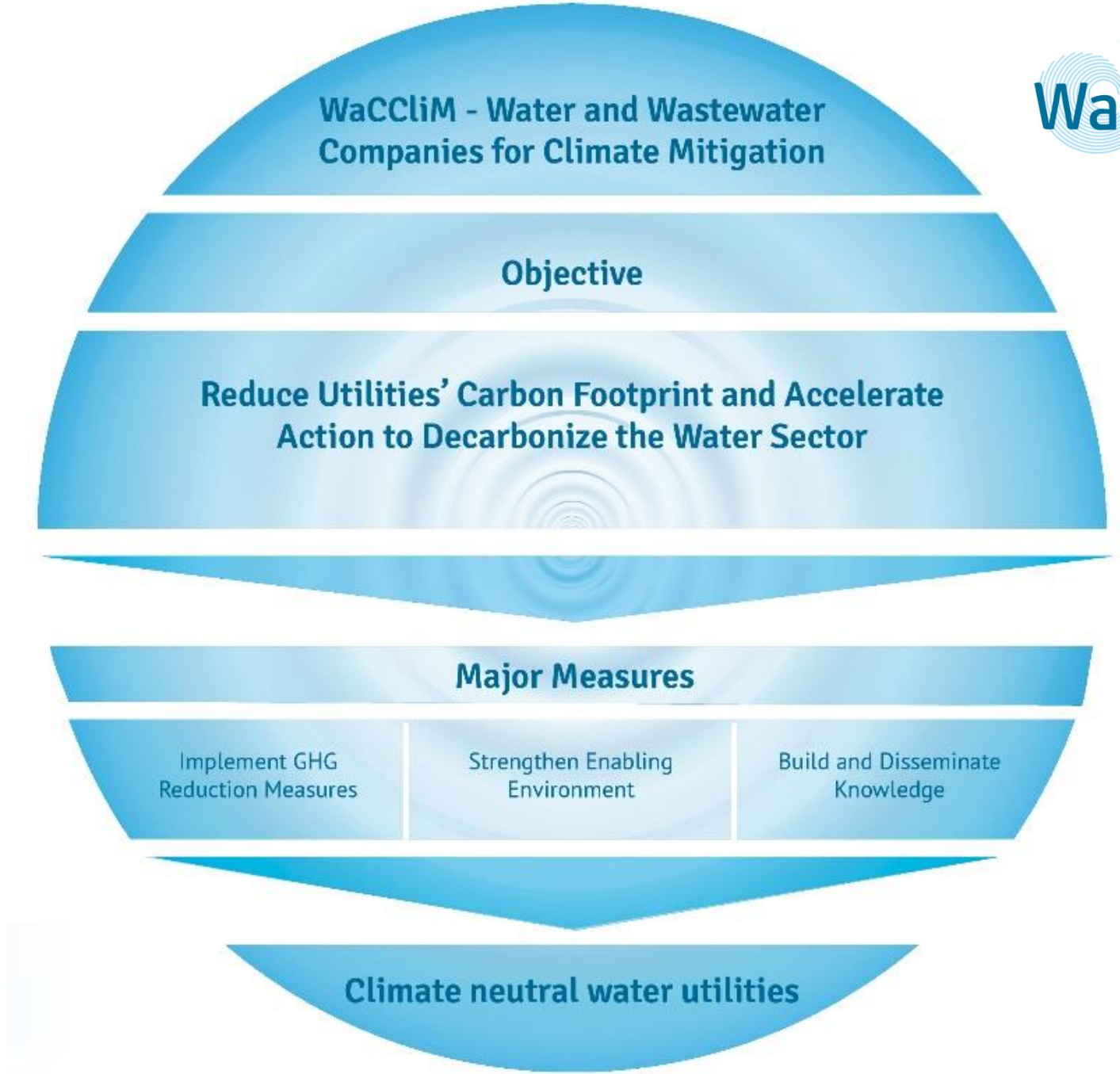
WaCCliM

Stockholm World Water Week 2017

27 August 2017

To limit global warming to 1.5°, GHG emissions have to be reduced in all sectors of the economy.

Water and Wastewater Companies for Climate Mitigation
WaCCliM


WaCCliM - Water and Wastewater Companies for Climate Mitigation
Objective
Reduce Utilities' Carbon Footprint and Accelerate Action to Decarbonize the Water Sector
Major Measures
Implement GHG Reduction Measures
Strengthen Enabling Environment
Build and Disseminate Knowledge
Climate neutral water utilities

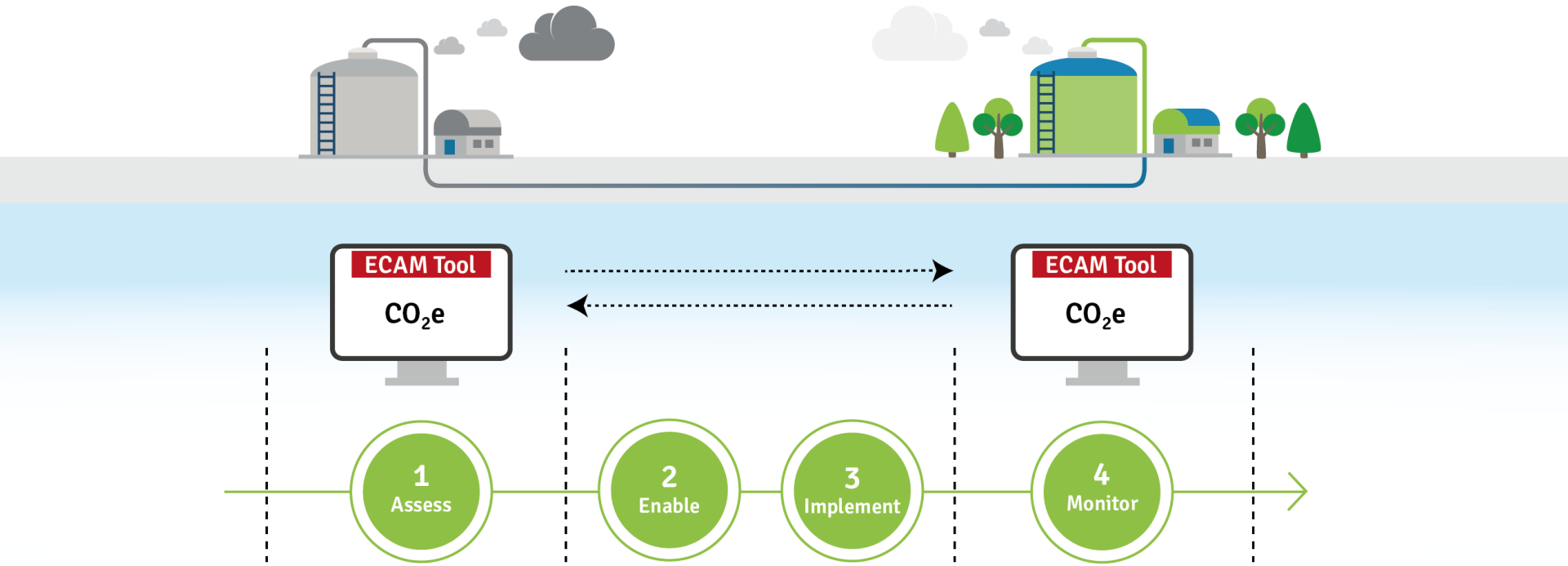
WaCCliM: Where are we working?

Water and Wastewater Companies for Climate Mitigation

WaCCliM

The ECAM Tool for the Transition to Low Carbon

Water and Wastewater Companies for Climate Mitigation
WaCCliM



Water and Wastewater Companies for Climate Mitigation

WaCCliM

Urban Water Management and Low-Carbon Development

Ricardo Cepeda-Márquez,

Head of Water & Waste Initiative, C40 Cities Climate Leadership Group

Quiz on Low Carbon Urban Water

Water and Wastewater Companies for Climate Mitigation

WaCCliM

Stockholm World Water Week 2017

27 August 2017

Question 1

How much does the urban water sector contribute to global carbon emissions ?

(Combining energy consumption, nitrous oxide and methane)

A. 0-1%

B. 1-5%

C. 5-10%

D. >10%

Question 1

How much does the urban water sector contribute to global carbon emissions ?

(Combining energy consumption, nitrous oxide and methane)

A. 0-1%

B. 1-5%

C. 5-10%

D. >10%

Globally the contribution may be up to 5%.

However locally, emissions may be more than 15%.

Question 2

How much of the total operational costs of a utility are spent on energy?

A. 0-10%
B. 10-20%
C. 20-35%
D. 35-70%

Question 2

How much of the total operational costs of a utility are spent on energy?

A. 0-10%
B. 10-20%
C. 20-35%
D. 35-70%

Typically 20-35% is spent on energy costs, but this can increase to 70% in Low and Middle Income countries.

Energy demand for water utilities may increase by 200% by 2050.

Question 3

How much higher are the emissions from untreated sewage compared to an average energy intensive conventional wastewater treatment?

A. Same
B. 2 times
C. 3 times
B. 5 times

Question 3

How much higher are the emissions from untreated sewage compared to an average energy intensive conventional wastewater treatment?

A. Same
B. 2 times
C. 3 times
B. 5 times

The path to carbon neutrality aligns with SDG 6:

- massive expansion of wastewater treatment
- wisely selecting technologies for service expansion

WaCCliM THAILAND

ECAM a Tool for Strengthening Capacities and Utility Performance

Mr. Chira Wongburana, Director General,
Wastewater Management Authority, Thailand

WaCCliM MEXICO

ECAM as Driver for Low Carbon Urban Water Systems

Andrés Rojo, GIZ Mexico

WaCCliM PERU

Utilities Prepare their Plans for Mitigation (ECAM) and Adaptation to Climate Change

Astrid Michels, GIZ Germany

WaCCLiM JORDAN

Use of ECAM to Link Mitigation in Water with Climate Finance

Bassam Hayek, GIZ Jordan

Group Discussions

Group 1: ECAM for **Monitoring GHG Reduction** in Low Carbon Urban Water Utilities (led by WaCCliM Mexico)

Group 2: ECAM for **Unlocking Financing** for Low Carbon Water and Wastewater Infrastructure (led by WaCCliM Jordan)

Group 3: ECAM for **Strengthening Capacities** in increasing Operational Efficiency (led by WaCCliM Thailand)

Our Partners

Water and Wastewater Companies for Climate Mitigation
WaCCliM

On behalf of:

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

of the Federal Republic of Germany

SAPAF SAN FRANCISCO

Sitrata

SEMARNAT
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

ESTADOS UNIDOS MEXICANOS

CONAGUA
COMISIÓN NACIONAL DEL AGUA

EPS SEDACUSCO S.A.

REPÚBLICA DEL PERÚ
PERÚ Ministerio de Vivienda, Construcción y Saneamiento

องค์การจัดการน้ำเสีย
Wastewater Management Authority

ميا هنا
miyahuna

Hashemite Kingdom of Jordan
Water Authority of Jordan

Implemented by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

IWA the international water association

Panel Discussion

- **Chira Wongburana**– Wastewater Management Authority, Thailand
- **Ricardo Cepeda** – C40
- **Mauro Nalesso** – Inter-American Development Bank
- **Mohamad Awamleh** – Miyahuna (Madaba & Zarqa), Jordan
- **Mona Bataineh** – Water Authority of Jordan

Take-home message

- Sound GHG accounting and reporting is needed to achieve our global targets.
- The urban water sector can contribute.

Use **ECAM**!

www.wacclim.org/ecam

Our Partners

Water and Wastewater Companies for Climate Mitigation
WaCCliM

On behalf of:

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

of the Federal Republic of Germany

SAPAF SAN FRANCISCO

Sitrata

SEMARNAT
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

ESTADOS UNIDOS MEXICANOS

CONAGUA
COMISIÓN NACIONAL DEL AGUA

EPS SEDACUSCO S.A.

REPÚBLICA DEL PERÚ
PERÚ Ministerio de Vivienda, Construcción y Saneamiento

องค์การจัดการน้ำเสีย
Wastewater Management Authority

ميا هنا
miyahuna

Hashemite Kingdom of Jordan
Water Authority of Jordan

Implemented by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

IWA the international water association