

## **Breakout session (Tuesday, 21 Feb., 2017)**

### **Group 1: Desalination in ESCWA Countries**

#### **Main task:**

Members of this workgroup are asked to discuss, based on the experience of group members in their respective countries, the following points of relevance to the W-E nexus in the desalination industry within ESCWA countries:

- 1) Identify opportunities to increase energy efficiency in desalination plants in ESCWA countries. Rank these opportunities as “implementable with minimum cost (simple retrofits)”, “implementable with moderate cost (mid-term retrofits)”, and “implementable with major costs (major, long-term retrofit)”
- 2) Identify opportunities to increase process efficiency by utilizing waste heat in thermal desalination plants in ESCWA countries? How practical is it?
- 3) What are the best practices in desalination already implemented in ESCWA countries based on financial indicators and/or achieved efficiency (both water and energy efficiency).

#### **Deliverable:**

10 Minutes before the end of the session, key points should be summarized in order to be reported to all participants in the following presentation session. One member of this group needs to do the reporting.

## **Breakout session (Tuesday, 21 Feb., 2017)**

### **Group 2: Water-Energy Nexus for the Oil and Gas Sector in ESCWA Countries**

#### **Main task:**

Members of this workgroup are asked to discuss, based on the experience of group members in their respective countries, the following points of relevance to the W-E nexus in the oil and gas industry within ESCWA countries:

- 1) Identify opportunities to increase water efficiency in oil and gas operations in ESCWA countries. Rank these opportunities as “implementable with minimum cost (simple retrofits)”, “implementable with moderate cost (mid-term retrofits)”, and “implementable with major costs (major, long-term retrofit)”
- 2) Identify opportunities to increase water recycling (both domestic wastewater and water from the oil and gas operations) in oil and gas operations in ESCWA countries? What are the proven benefits and challenges based on the experience within the ESCWA countries?
- 3) What are the best practices in EOR implemented in ESCWA countries based on financial indicators and/or achieved efficiency (both water and energy efficiency).

#### **Deliverable:**

10 Minutes before the end of the session, key points should be summarized in order to be reported to all participants in the following presentation session. One member of this group needs to do the reporting.

## **Breakout session (Tuesday, 21 Feb., 2017)**

### **Group 3: Water Reuse in ESCWA Countries**

#### **Main task:**

Members of this workgroup are asked to discuss, based on the experience of group members in their respective countries, the following points of relevance to water reuse within ESCWA countries:

- 1) Identify opportunities to increase water reuse in households in ESCWA countries. Rank these opportunities as “implementable with minimum cost (short-term retrofits)”, “implementable with moderate cost (mid-term retrofits)”, and “implementable with major costs (major, long-term changes)”
- 2) What are the key challenges facing ESCWA countries in increasing their recycled water utilization? How can these challenges be overcome, based on practices within the ESCWA countries?
- 3) What are the best energy management practices in WWTP in ESCWA countries based on financial indicators and/or achieved energy efficiency?

#### **Deliverable:**

10 Minutes before the end of the session, key points should be summarized in order to be reported to all participants in the following presentation session. One member of this group needs to do the reporting.