**GCoM Business Matchmaking**

**Questionnaire for Businesses participating at the 2024 Smart Cities Expo and World Congress**

**5th to 7th October 2024 in Barcelona**

**Introduction:**

GCoM Signatory Cities participating at the 2024 Smart Cities Expo and World Congress in Barcelona from 5-7 November 2024 will be introduced to businesses with potential capacity to support solve challenges from the cities. In order to identify relevant businesses, cities and businesses are requested to complete matching questionnaires.

The purpose of this questionnaire is to summarise your organisations’ products and solutions so that GCoM signatory cities may request to contact you.

**Timeline and Deadlines:**

23rd October 2024

**Sectors of Relevance:** water supply, waste management, energy, building, nature based solutions, circular economy, digital and mobility sectors.

**Section 1. General Information:**

**Company Information:**

1. Company Name:
2. Country:
3. Website:
4. Founding Year:
5. Capital:
6. Employees (approx. range):

**Product and Services Information:**

1. **Scope. Indicate the main scopes or sectors of solutions provided:**

1. Energy & Power Grid

2. Construction & Buildings

3. Mobility & Logistics

4. Waste Management and Circular Economy

5. Water & Urban Infrastructure

6. Other – indicate

1. **Description of products and services (Max 2000 characters)**
2. **Open to business in which regions:**

1. Americas

2. Asia

3. Eastern Europe

4. Mediterranean / Middle East

5. Sub Saharan Africa

6. European Union

1. **Indicate specific countries / cities interested in meeting (see SCEWC participation cities list)**

**Pre-defined Challenges**

See below pre-defined city challenges. Please tick any of the boxes if the solutions your business provides are relevant to the challenges below most common to the cities. You may select multiple challenges.

1. Energy & Power Grid

* 1. Making Clean Energy Generation Accessible and Cost-effective

Challenge 1.1.1 Facilitating investment in centralized and decentralized renewable energy production

Challenge 1.1.2 Quantifying the potential for local, decentralized clean energy production

Challenge 1.1.3 Integrating solar energy into existing infrastructure

Challenge 1.1.4 Making wind energy production palatable for urban environment

Challenge 1.1.5 Accelerating the uptake of geo-energy for heating and cooling

Challenge 1.1.6 Developing the uptake of biogas recovery from landfills

* 1. Maximizing the Resilience of Electricity Distribution Networks

Challenge 1.2.1 Designing smart and scalable distribution networks

Challenge 1.2.2 Ensuring reliable electricity supply given intermittency of renewable power

Challenge 1.2.3 Incentivizing consumers to actively manage their electricity demand

Challenge 1.2.4 Making stationary battery energy storage financially viable

2. Construction & Buildings

2.1 Decarbonizing the Entire Life-cycle of Construction Materials

Challenge 2.1.1 Making more concrete or concrete alternatives, whilst retaining integral qualities

Challenge 2.1.2 Identifying effective insulation materials with lower carbon footprints

Challenge 2.1.3 Integrating demolition and plastic waste into construction materials

Challenge 2.1.4 Creating a market for reusing construction waste

2.2 Optimizing Design and Construction Methods to Save Resources

Challenge 2.2.1 lntegrating circular and efficient construction and renovation techniques

Challenge 2.2.2 Optimizing logistics for construction sites

2.3 Equipping buildings with efficient heating, cooling & lighting hardware systems

Challenge 2.3.1 Maximizing natural light in buildings

Challenge 2.3.2 Adopting external insulation, and passive heating & cooling technologies

Challenge 2.3.3 Popularizing clean micro generators or heat pumps for all buildings

Challenge 2.3.4 Boosting the use of heat-recovery systems

Challenge 2.3.5 Exploiting excess heat from data centers

Challenge 2.3.6 Highlighting building retrofit benefits for businesses and consumers

2.4 Optimizing energy consumption and building management with existing assets

Challenge 2.4.1 Demonstrating consumption- reducing smart systems for real—estate companies

Challenge 2.4.2 Making HVAC and lighting optimization accessible to all buildings

3. Mobility & Logistics

3.1 Reducing Time and Distance of Travels

Challenge 3.1.1 Reducing traffic congestion

Challenge 3.1.2 0ptimizing vehicle routes

Challenge 3.1.3 Planning grouped transport services

3.2 Reducing Emissions per km for Road Transport Vehicles

Challenge 3.2.1 Reducing the emissions of combustion engines

Challenge 3.2.2 Transitioning to low-carbon vehicles

Challenge 3.2.3 Creating the infrastructure for EV adoption

3.3. Promoting ‘Zero-carbon’ Modes of Transport

Challenge 3.3.1 lncentivizing the use of bikes for in-city mobility

Challenge 3.3.2 Developing micro-mobility platforms

Challenge 3.3.3 Persuading urban delivery companies to use small electric

Challenge 3.3.4 Encouraging multimodal delivery methods for the final kilometer

4. Waste Management and Circular Economy

4.1 Addressing Upstream Production of Municipal Waste

Challenge 4.1.1 Food waste

Challenge 4.1.2 Reducing waste in packaging

Challenge 4.1.3 Prioritizing renting over buying

Challenge 4.1.4 lncentivizing the repair-resell economy

4.2. Improving Recycling Rates

Challenge 4.2.1 Integrating waste sorting throughout the value chain

Challenge 4.2.2 Valorizing organic waste locally, including biogas recovery

Challenge 4.2.3 Implementing alternatives to landfilling for plastic and other municipal solid waste

5. Water & Urban Infrastructure

5.1 Developing and Maintaining Resilient, Efficient Water Distribution Systems

Challenge 5.1.1 Preventing water leaks

Challenge 5.1.2 Maintaining water infrastructure

5.2. Adapting Wastewater Treatment Processes to Population Growth and Increasingly Strict Regulations

Challenge 5.2.1 Increasing capacity and efficiency of wastewater treatment plants

Challenge 5.2.2 Increasing water saving and recycling in situ

* 1. Improving Quality of Life, Biodiversity and the Efficiency of Utilities

Challenge 5.3.1 Creating more green spaces in urban areas

Challenge 5.3.2 Combining storm water recovery, vegetalization and temperature regulation

Challenge 5.3.3 Democratizing access to air quality monitoring and air purification

Challenge 5.3.4 Decreasing the footprint of lighting

Challenge 5.3.5 Soil Stability, quality and reforestation

Challenge 5.3.6 Desalination of Land

Challenge 5.3.7 Development of Urban decentralised Permaculture

5.4. Adaptation and Mitigation to Flooding

Challenge 5.4.1 Flood Plain Mapping and design of territory

Challenge 5.4.2 Flooding mitigation through nature based solutions

Challenge 5.4.3 Flooding mitigation through infrastructures and drainage systems

Challenge 5.4.4 Implementation of coastal erosion mitigation measures

Thank you!

This is the end of the questionnaire.