# Possible Contribution of JCM Projects to SDGs

Global Environment Centre Foundation(GEC)



#### Possible Contribution of Energy-efficient Equipment Projects to SDGs

Reduce GHG emission by introducing more efficient equipment. Examples include;



Air conditioners



Heaters



Medical equipment



Water treatment equipment

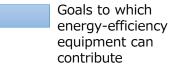


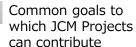
**Boilers** 



Other high-efficient equipment

<Graph Legends>





#### **Planning**

## **Implementation**

#### Operation

#### Decommission



Participation in decision-making(5.5)Protection of land rights (5.a)



·Improved energy efficiency (7.3)



•Improved resource-use efficiency in consumption and production (8.4)

·Sustainable tourism (8.9)



·Increase resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes (9.4)



•Enhanced inclusive and sustainable urbanization (11.3)

·Reduced adverse environmental impacts of cities with attention to air quality and waste management (11.6)



·Sustainable management and efficient use of natural resources (12.2)

·Environmentally sound management of chemicals and waste throughout their life cycle (12.4)

•Reduced waste generation through prevention, reduction and recycling and reuse (12.5)



Sustainable management of project site (15.2)



•Reduce inequality by procurement with fair price (10.3)



Publish sustainability reports (12.6)



• Education and training for relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (4.4)



• Increase employment of women to managerial and technical positions (5.5) and gender sensitive work environment (Guideline on Gender Equality for JCM)



· Full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value (8.5)





Adopt supply chain without child labor, exploitation, conflict and corruption (5.2, 8.8, 16.2, 16.5)



· Environmentally sound management of all wastes throughout their life cycle (12.4)



Take urgent action to combat climate change and its impacts (13)



· Promote the development, transfer, dissemination and diffusion of environmentally sound technologies (17.7)

Enhance the global partnership for sustainable development (17.16)

# Possible Contribution of Renewable Energy Projects to SDGs

GHG emission reduction can be implemented though renewable energy generation by replacing electric power derived from fossil fuel combustion



Photovoltaic Generation



Hydraulic Power Generation



Wind Power Generation

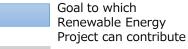


Geothermal Generation



Biomass• Biogas Generation

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Common Goal to which JCM Projects can contribute

\*\*The listed goals are no more than recommended examples with high potential to contribute through implementing JCM project. These goals are not limited nor mandatory to contribute.

# **Planning**

## **Implementation**

#### Operation

Decommission



•Ensure women's participation such as public hearing (5.5)

•Equal rights to ownership and compensation of land acquisition (5.a)



•Equal rights to basic services (1.4)



•Increase share of renewable energy (7.2)



·Enhance inclusive and sustainable urbanization (11.3)

·Reduce air pollution(11.6)



Develop quality, reliable, sustainable and resilient infrastructure (9.1)

•Increase resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes (9.4)



Sustainable management and efficient use of natural resources (12.2)

Environmentally sound management of all wastes throughout their life cycle (12.4)

• Reduce waste generation through prevention, reduction, recycling and reuse (12.5)



Sustainable management of all types of forests (15.2)



Reduce inequality by procurement with fare price (10.3)



Publish sustainability reports (12.6)



• Education and training for relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (4.4)



·Increase employment of women to managerial and technical positions (5.5) and gender sensitive work environment (Guideline on Gender Equality for JCM)



•Full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. (8.5)





·Adopt supply chain without child labor, exploitation, conflict and corruption. (5.2, 8.8, 16.2, 16.5)



•Environmentally sound management of all wastes throughout their life cycle (12.4)



·Take urgent action to combat climate change and its impacts. (13)



•Promote the development, transfer, dissemination and diffusion of environmentally sound technologies (17.7)

Enhance the global partnership for sustainable development. (17.16)

#### Possible Contribution of Effective Use of Energy Projects to SDGs



GHG emission reduction can be implemented though recovery and reuse of heat energy from production facilities and power

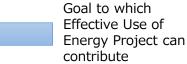


Waste Heat Recovery System



Gas Cogeneration

#### <Graph Legends>



Common Goal to which JCM Projects can contribute

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# **Planning**

#### **Implementation**

# Operation

#### **Decommission**



Reduce harmful effect to environment (11.6)



- •Ensure universal access to affordable, reliable and modern energy services (7.1)
- Double the global rate of improvement in energy efficiency (7.3)



- ·Develop quality, reliable, sustainable and resilient infrastructure (9.1)
- •Increase resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes (9.4)



- ·Sustainable management and utilization of natural resources (12.2)
- •Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production (12.a)



·Appropriate management of project site by environmental assessment (15.2)



·Reduce inequality by procurement with fair price (10.3)



Publish sustainability reports(12.6)



• Education and training for relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (4.4)



•Increase employment of women to managerial and technical positions (5.5) and gender sensitive work environment (Guideline on Gender Equality for JCM)



•Full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. (8.5)





·Adopt supply chain without child labor, exploitation, conflict and corruption. (5.2, 8.8, 16.2, 16.5)



·Environmentally sound management of all wastes throughout their life cycle (12.4)



·Take urgent action to combat climate change and its impacts. (13)



- Promote the development, transfer, dissemination and diffusion of environmentally sound technologies (17.7)
- Enhance the global partnership for sustainable development. (17.16)

#### **Possible Contribution** of Waste-to-Energy **Projects to SDGs**

Reduce GHG emission by utilizing thermal energy from combustion of waste to generate electricity.



Waste-to-energy facilities

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Goals to which Waste-to-Energy projects can contribute

> Common goals to which JCM Projects can contribute

\*The recommended examples with high potential to contribute through implementing JCM project. These goals are not limited nor mandatory to contribute.

#### **Planning**

## **Implementation**

# **Operation**

#### **Decommission**



- Sustainable industrialization (9.a)
- clean and environmentally sound technologies and industrial processes (9.4)



- Sustainable urbanization (11.3)
- Reduced air pollution (11.6)



Reduced number of deaths and illnesses from hazardous chemicals and air, water and soil  $\rightarrow \psi$  pollution (3.9)



· Improved water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials (6.3)



·Sustainable management of project site (15.2)



- Access to affordable, reliable and modern energy services (7.1)
- Increased share of renewable energy (7.2)
- Promotion of investment in energy infrastructure and clean energy technology (7.a)



Substantially reduce waste generation through prevention, reduction, recycling and reuse (12.5)



•Reduce inequality by procurement with fair price (10.3)



Publish sustainability reports (12.6)



Education and training for relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (4.4)



· Increase employment of women to managerial and technical positions (5.5) and gender sensitive work environment (Guideline on Gender Equality for JCM)



· Full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value (8.5)





Adopt supply chain without child labor, exploitation, conflict and corruption (5.2, 8.8, 16.2, 16.5)



• Environmentally sound management of all wastes throughout their life cycle (12.4)



Take urgent action to combat climate change and its impacts (13)



- Promote the development, transfer, dissemination and diffusion of environmentally sound technologies (17.7)
  - Enhance the global partnership for sustainable development (17.16)

# Possible Contribution of Transport Projects to SDGs

GHG emission reduction can be implemented in though trucks with digital tachograph system to improve energy efficiency, fuel conversion of autos, freshness preservation reefer container



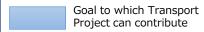
Ecological drive



Fuel conversion



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- Common Goal to which
  JCM Projects can
  contribute
- \*\*The listed goals are no more than recommended examples with high potential to contribute through implementing JCM project. These goals are not limited nor mandatory to contribute.

## **Planning**

·Halt deforestation (15.2)

action to reduce the

(15.5)

Take urgent and significant

halt the loss of biodiversity

degradation of natural habitats,

#### **Implementation**

#### Operation

#### Decommission



- •End hunger and ensure access by all people to safe, nutritious and sufficient food all year round(2.1)
- Double the agricultural productivity and incomes of small-scale food producers (2.3)
- ·Halve the number of global deaths and injuries from road traffic accidents (3.6)
- ·substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination (3.9)
- Improve the global rate in energy efficiency (7.3)
- Improve global resource efficiency in consumption and production (8.4)
   Devise and implement policies to promote sustainable tourism (8.9)
- Develop quality, reliable, sustainable and resilient infrastructure (9.1)
  Increase resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes (9.4)
  - Provide access to sustainable transport systems (11.2)
     Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management (11.6)

- 12 ocean
- Sustainable management and efficient use of natural resources (12.2)
  - · Reduce food losses (12.3)
  - $\cdot$  Reduce waste generation through prevention, reduction, recycling and reuse (12.5)
- Reduce inequality by procurement with fair price (10.3)
- •Publish sustainability reports(12.6)
- •Education and training for relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (4.4)
- •Increase employment of women to managerial and technical positions (5.5) and gender sensitive work environment (Guideline on Gender Equality for JCM)
- •Full and productive employment and decent work for all women and men, and equal pay for work of equal value. (8.5)
  - •Adopt supply chain without child labor, exploitation, conflict and corruption. (5.2, 8.8, 16.2, 16.5)
- · Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle (12.4)
- ·Take urgent action to combat climate change and its impacts. (13)
  - ·Promote the development, transfer, dissemination and diffusion of environmentally sound technologies (17.7)
    ·Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources (17.16)