



SDG7 Energy Compact of [Company/stakeholder]

A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

SECTION 1: AMBITION

1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply, and make sure to state the baseline of each target]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)

<input type="checkbox"/> 7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.	Target(s): Toyama citizens, businesses Time frame: 2009-2030 Context for the ambition(s): Based on electricity and gasoline, a system has been established to ensure sustainable and stable supply and demand of modern energy services in the industrial, consumer, and transportation sectors. Toyama City will continue to ensure universal access.
<input type="checkbox"/> 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.	Target(s): Toyama citizens, businesses Time frame: 2021-2030 Context for the ambition(s): The share of renewable energy in 2017 was 41.4%, however, with the aim of realizing a zero-carbon city by 2050, we will formulate the Toyama City Energy Vision and increase the share to 47.2% by 2030, mainly through solar power generation.
<input type="checkbox"/> 7.3. By 2030, double the global rate of improvement in energy efficiency.	Target(s): Toyama citizens, businesses, public transportation Time frame: 2010-2030 Context for the ambition(s): Through Toyama City's "Compact City Planning through Public Transportation," we will promote initiatives to double energy efficiency from 0.7% (2011) to 1.4% by 2030.
<input type="checkbox"/> 7. a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.	Target(s): Businesses, International organizations, Toyama City Government Time frame: 2014-2030 Context for the ambition(s): We will strengthen cooperation with JICA (Japan International Cooperation Agency), ADB (Asian Development Bank), and the World Bank to introduce clean energy technologies owned by Toyama companies to developing countries. We will also promote investment in clean energy technology by stimulating energy business in the city. Currently the city has been working on international projects in 4 cities and 1 region in Indonesia, Malaysia, Maldives, and Chile. We will aim to develop at least one project in each city.
<input type="checkbox"/> 7. b. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support.	Target(s): International organizations, citizens of developing countries, Toyama City Government Time frame: 2014-2030 Context for the ambition(s): We will strengthen our international network cooperation with organizations such as ICLEI (Local Government for Sustainability) and IGES (Institute for Global Environmental Strategies) regarding our compact city planning and environmental policies. In addition, we will contribute to the promotion of SDGs through international collaboration in cities and regions, especially in Southeast Asia, by supporting their local community development and improving living standards.

1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. [Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]

Target(s): n/a
 Time frame: n/a
 Context for the ambition(s): n/a

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

<p><i>Description of action (please specify for which ambition from Section 1)</i> (7.1.) While making use of existing public transportation such as railways, tram and buses, the city will try to relocate urban functions necessary for living to coalesce around areas within walking distance. In addition, we will position our “compact city planning through public transportation” as the future vision for the city, and implement pioneering initiatives such as: -Formation of the Light Rail Transit (LRT) network (phase1. Portram: runs from Toyama Station to Toyama Port, phase2. Centrum; Loop line in the city center, phase3 Completion of intermodal transport connectivity in Toyama Station; development of an elevated railway at Toyama Station (for bullet train) and North-South connection of tramlines) -Rider incentive programs (senior discount pass: Seniors 65 years and older living in Toyama city can ride any public transportation for 100yen (about US\$1) per ride).</p>	<p><i>Start and end date</i> 2009-2030</p>
<p><i>Description of action (please specify for which ambition from Section 1)</i> (7.2.) (1) A public campaign to promote the use of renewable energy, (2) the promotion of energy conservation, (3) revitalization of the energy businesses in Toyama, and (4) collaboration with stakeholders are the basic principles for developing and reinforcing various projects aimed at achieving carbon neutrality.</p>	<p><i>Start and end date</i> 2021-2050</p>
<p><i>Description of action (please specify for which ambition from Section 1)</i> (7.3.) As in the action in (7.1.), based on the basic policy of our “Compact City Planning Through Public Transportation,” we will relocate urban functions so they coalesce around areas within walking distance, and promote energy saving and the use of renewable energy to improve energy efficiency.</p>	<p><i>Start and end date</i> 2011-2030</p>
<p><i>Description of action (please specify for which ambition from Section 1)</i> (7.a.) Through collaboration with various international organizations, including Japan’s Ministry of Environment, Toyama City will provide support for solving the problems related to SDGs in cities in developing countries where we are currently working. We will also work on building an autonomous distributed energy infrastructure and network through public-private partnerships.</p>	<p><i>Start and end date</i> 2014-2030</p>
<p><i>Description of action (please specify for which ambition from Section 1)</i> (7.b.) Through public-private partnerships with companies in Toyama City, we will promote projects for decarbonization technologies such as solar panels, micro hydroelectric generation, and hydrogen in cities in developing countries, primarily in Southeast Asia such as Indonesia and Malaysia, to help solve their local problems. We will also share our knowledge of SDGs.</p>	<p><i>Start and end date</i> 2014-2030</p>

SECTION 3: OUTCOMES

3.1. Please add at least one measurable and for each of the actions from section 2. [Please add rows as needed].

<p><i>Outcome</i> (7.1.) Percentage reduction in greenhouse gas emission (base year: 2005). (7.2.) Ratio of renewable energy installation production to electricity demand. (7.3.) Pace of energy efficiency improvement (base year: 2011)).</p>	<p><i>Date</i> (7.1.) Conduct a follow-up every year to measure the percentage of reduction. (7.3.) Conduct a follow-up every year to measure the pace of energy efficiency improvement.</p>
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(7.a.) Although there are no specific numerical targets, we aim to achieve the “Action 1 target” by actively promoting public-private partnerships by 2030.
 (7.b.) Although there are no specific numerical targets, the introduction of decarbonization technologies and knowledge of SDGs to developing countries will contribute to solving other issues in these regions.

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for **each** of the actions in section 2.

(7.1.) City budget and private investment based on our compact city strategy for decarbonization.
 (7.2.) Funds for the introduction of renewable energy and energy-saving equipment and green finance to support business (ESG investment).
 City budget for (7.1.) and (7.2.) for FY 2021 is 470,000 USD.
 (7.3.) City budget and private investment based on our compact city strategy.
 City budget for (7.3) for FY 2021 is 34 million USD (This is the annual budget of the department in charge of strategic urban development regarding the compact city planning and does not include budget for construction and welfare.)
 (7.a.) Investment in market development using advanced technologies.
 (7.b.) Fund for the introduction of decarbonization technologies for cities in developing countries. The budget scale will depend on the projects we develop in the future.

4.2. [For countries only] In case support is required for the actions in section 2, please select from below and describe the required support and specify for which action.

[Examples of support for Member States could include: Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; development of integrated energy plans and energy transition pathways; technical assistance, etc.]

<input type="checkbox"/> Financing	Description
<input type="checkbox"/> In-Kind contribution	Description
<input type="checkbox"/> Technical Support	Description
<input type="checkbox"/> Other/Please specify	Description

SECTION 5: IMPACT

5.1. Countries planned for implementation including number of people potentially impacted.

Japan, Toyama: 420,000
 In (7.a.)(7.b.), Indonesia: Bali (4.2 million), Semarang City (1.57 million)
 Malaysia: Johor (3.7 million), Kota Kinabalu (450,000)
 Chile: Renca district (150,000)
 Maldives: Male City (140,000)

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how **each** of the actions from section 2 impact advancing the SDGs by 2030.
[up to 500 words, please upload supporting strategy documents as needed]

(7.1.) (7.3.) The promotion of compact city planning through reimagining and reinvigorating public transportation has a positive impact on SDGs in terms of creating a sustainable and resilient city for Toyama, which has been highly dependent on automobiles, and has an aging population and low birth rate. For example, the revitalization of public transportation gives people options to travel other than by car and creates opportunities to go out. In a survey of 1,300 households along a public transportation system (LRT) that runs north of Toyama Station, 54.3% said that the LRT had changed their behavior, and 25.3% of them said that it had reduced the number of times they drive their own cars. In addition, 30.1% answered that they have more opportunities to meet with acquaintances and other people. Furthermore, from an economic perspective, while the average land price in Toyama Prefecture as a whole has been declining since 1993, Toyama City has seen the increase of land prices for seven consecutive years through FY2020. These are just some of the results of the compact city policy, but it can be said that this policy has made a significant contribution to the promotion of the SDG7 and 11, in terms of improving energy efficiency in the city.

(7.2.) In addition to these actions in central areas and areas along public transportation lines, the promotion of environmentally friendly agriculture in suburban areas by introducing renewable energy sources such as micro hydroelectric power using agricultural water, and the practice of environmental education by elementary and junior high school students are contributing to the promotion of SDGs 2,7, and 13.

(7.a.) Strengthening partnerships with international organizations and other stakeholders for solving problems is a way to promote SDG17. In the past, through partnerships, the city has contributed not only to eliminating un-electrified areas and introducing clean energy with micro hydroelectric power systems in Tabanan Regency, Indonesia, but also to solving local water shortage issues and revitalizing agriculture in Klungkung Regency, Indonesia.

(7.b.) In the City of Semarang, Indonesia, where traffic congestion is an issue, we collaborated with a company in Toyama to implement a project to convert the diesel engines of 72 public buses to engines that can run on cleaner natural gas. Strengthening partnerships, including the action in 7.a., will have a significant impact on the promotion of the international SDGs.

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how **each** of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050. *[up to 500 words, please upload supporting strategy documents as needed]*

(7.1.) (7.3.) Promoting compact city planning through public transportation means presenting citizens with a lifestyle that does not require them to rely on private cars. The more people use public transportation, the more traffic congestion will be reduced, and the less greenhouse gases will be emitted, which is consistent with the Paris Agreement.

(7.2.) These actions directly contribute to the reduction of greenhouse gas emissions, and we will continue to promote various projects to achieve carbon neutrality.

(7.a.)(7.b.) Toyama City, together with companies in the city has been conducting feasibility studies on the introduction of decarbonization technologies such as micro hydroelectric power generation, solar power generation, and hydrogen to cities in developing countries, mainly in Southeast Asia, through collaboration with stakeholders including various international organizations. On the other hand, many developing countries still rely on diesel power generation as a base load power source. We aim to help create a decarbonized society in line with the Paris Agreement, while also considering the effective use of LNG instead of diesel, since LNG emits less greenhouse gas than diesel.

SECTION 6: MONITORING AND REPORTING

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

As a system to promote zero-carbon activities and to implement measures from a cross-organizational perspective for achieving SDGs, we have established the Toyama City SDGs Future City Promotion Headquarters within the city hall. In addition, at the “Toyama City Future City Strategy Meeting” with outside experts, we receive opinions on the progress of various projects including the actions in Section 2, and KPIs* positioned in the SDGs Future City Plan including the outcomes in Section 3, and implement PDCA cycle management regarding SDGs, including zero carbon, by taking a broad overview of zero carbon measures. Furthermore, the Mayor will take the top management role in both the “SDGs Future City Promotion Headquarters” and “SDGs Future City Strategy Council” to establish an effective promotion system.

*KPIs:

1. Annual Gross Citizen Product: 19.143 billion USD by 2030 (17.939 billion USD in 2020)
2. Citizens who feel healthy: 86% by 2030 (81.8% in 2016)
3. Reduction rate of greenhouse gas emissions (compared to 2005): 30.0% by 2030 (11.4% in 2017)

SECTION 7: GUIDING PRINCIPLES CHECKLIST

Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.

I. Stepping up ambition and accelerating action - Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement

I.1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks?

Yes No

I.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? Yes No

I.3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 - as defied by latest global analysis and data including the outcome of the Technical Working Groups? Yes No

II. Alignment with the 2030 agenda on Sustainable Development Goals – Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities.

II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030? Yes No

II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? Yes No

II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action? Yes No

III. Alignment with Paris Agreement and net-zero by 2050 - Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies.

III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050? Yes No

III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? Yes No

III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? Yes No

IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies - Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.

IV.1. Does the Energy Compact include socio-economic impacts of measures being considered? Yes No

IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition? Yes No

IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)? Yes No

V. Feasibility and Robustness - Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed.

V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? Yes No

V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives? Yes No

V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistant needs and partnerships, policy and regulatory gaps, data and technology)? Yes No

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

8.1. Title/name of the Energy Compact

Realize a Sustainable Value Added Innovative City through a Compact City Strategy

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

Environmental Policy Division, Toyama City Government

8.3. Lead entity type

Government

Local/Regional Government

Multilateral body /Intergovernmental Organization

Non-Governmental Organization (NGO)

Civil Society organization/Youth

Academic Institution /Scientific Community

Private Sector

Philanthropic Organization

Other relevant actor

8.4. Contact Information

Keiichi Kobayashi (MR.), Section Chief of Environmental Policy Div.
kankyousei-01@city.toyama.lg.jp

8.5. Please select the geographical coverage of the Energy Compact

Africa Asia and Pacific Europe Latin America and Caribbean North America West Asia Global

8.6. Please select the Energy Compact thematic focus area(s)

Energy Access Energy Transition Enabling SDGs through inclusive just Energy Transitions Innovation, Technology and Data Finance and Investment.

SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)

Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc.

n/a