



### SDG7 Energy Compact of Indore Smart City Development Limited, MP

#### 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)

| □ <b>5.</b> E- mobility               | Target(s): 400 EV buses. 10000 E-riskshaws. 200 charging stations. All Govt. staff vehicles shall be electric.<br>Time frame: 2022-2030 |
|---------------------------------------|---|
|                                       |   |
|                                       | Context for the ambition(s):  |
|                                       | 1. Increase the EV Public Transport fleet to 400 buses in the city. Setup more than 200 charging stations in the city.                  |
|                                       | 2. Deployment of E mobility solutions like buses, E-rickshaws, charging stations etc.   |
| <b>7.1.</b> By 2030, ensure universal | Target(s): 100% affordable and reliable energy services provision to all inhabitants and advanced metering                              |
| access to affordable, reliable,       | infrastructure (AMI) is an integrated system of smart meters.   |
| and modern energy services.           | Time frame: 2022-23   |
|                                       | Context for the ambition(s):  |
|                                       | 1.To provide 24 x7 Energy Supply in all parts of the city   |
|                                       | 2. To Improving Monitoring and Transparency through Smart Meters.   |
|                                       | 3. Using Smart Energy Grid with the help of Technology enabled sub Installation of Smart Meters in all                                  |
|                                       | parts of the City for developing Transparency in Metering and Billing Process   |
|                                       | 4. Since Indore city has been declared as 24 x7-power supply , therefore there are no scheduled outages                                 |
|                                       | due to load shedding.   |
|                                       | 5.Smart energy meter will install approx. 8 lacs in the city.   |
| <b>7.2.</b> By 2030, increase         | Target(s): 7 % of total energy consumption from renewable sources from plants installed in Indore region and                            |
| substantially the share of            | renewable energy supplied in the grid by MP Discom for the city.  |
| renewable energy in the global        | Time frame: Target year 2022-23   |
| energy mix.                           | Context for the ambition(s):  |

|   | <ol> <li>Proposed capacity of industry, institution and household of 20 Mw solar power plant in the Indore<br/>region.</li> <li>120 Mw solar power plant in pipeline by Indore Smart city.</li> <li>16 lacs Square meter open ground space available for mounted solar power plant near jalud water<br/>pupmping station</li> <li>6 cr. square meter water body surface available for floating solar power plants at yashwant sagar.</li> <li>Conventional light will be replaced by solar street light in gardens at Indore city</li> </ol> |
|---|--|
| □ <b>7.3.</b> By 2030, double the global rate of improvement in energy efficiency.  | <ul> <li>Target(s): Energy efficiency enhancement by 100 % in entire Indore city</li> <li>Time frame: 2022-23</li> <li>Context for the ambition(s): <ol> <li>79 thousand conventional light replaced by energy efficient LED light.</li> <li>Conventional light will be replaced by solar street light in gardens at Indore city .</li> </ol> </li> </ul>  |
| ✓ 7.a. By 2030, enhance<br>international cooperation to<br>facilitate access to clean<br>energy research and<br>technology, including<br>renewable energy, energy<br>efficiency and advanced and<br>cleaner fossil-fuel technology,<br>and promote investment in<br>energy infrastructure and<br>clean energy technology. | Target(s): Not applicable<br>Time frame:<br>Context for the ambition(s):   |
| ✓ 7.b. By 2030, expand<br>infrastructure and upgrade<br>technology for supplying<br>modern and sustainable<br>energy services for all in<br>developing countries, in<br>particular least developed<br>countries, small island<br>developing States, and land-<br>locked developing countries, in<br>accordance with their | Target(s): Not applicable<br>Time frame:<br>Context for the ambition(s):   |

| <ul> <li>arget(s):</li> <li>ime frame: 2030</li> <li>ontext for the ambition(s): <ol> <li>It is targeted to plant more than 7 lacs trees annually.</li> <li>120 Mw solar power plant in pipeline by Indore Smart City. It will decrease dependency over the fossil fired plants.</li> <li>Proposed Indore metro will be rapid transit with 10 corridors (5 estimated, 5 planned including one construction) covering 124 km.</li> <li>30 Km of cycling lanes on both side of present BRTS corridor.</li> <li>Proposed 400 Ev buses and 10000 E-riskshaws.</li> </ol> </li> </ul> | subs   | sidies etc.]   |
|--|--------|--|
| <ol> <li>It is targeted to plant more than 7 lacs trees annually.</li> <li>120 Mw solar power plant in pipeline by Indore Smart City. It will decrease dependency over the fossil fired plants.</li> <li>Proposed Indore metro will be rapid transit with 10 corridors (5 estimated, 5 planned including one construction) covering 124 km.</li> <li>30 Km of cycling lanes on both side of present BRTS corridor.</li> <li>Proposed 400 Ev buses and 10000 E-riskshaws.</li> </ol>  | Гarget | :(s):  |
| <ol> <li>It is targeted to plant more than 7 lacs trees annually.</li> <li>120 Mw solar power plant in pipeline by Indore Smart City. It will decrease dependency over the fossil fired plants.</li> <li>Proposed Indore metro will be rapid transit with 10 corridors (5 estimated, 5 planned including one construction) covering 124 km.</li> <li>30 Km of cycling lanes on both side of present BRTS corridor.</li> <li>Proposed 400 Ev buses and 10000 E-riskshaws.</li> </ol>  | Time f | rame: 2030   |
| <ol> <li>120 Mw solar power plant in pipeline by Indore Smart City. It will decrease dependency over the fossil fired plants.</li> <li>Proposed Indore metro will be rapid transit with 10 corridors (5 estimated, 5 planned including one construction) covering 124 km.</li> <li>30 Km of cycling lanes on both side of present BRTS corridor.</li> <li>Proposed 400 Ev buses and 10000 E-riskshaws.</li> </ol>  | Conte  | xt for the ambition(s):  |
| <ol> <li>Proposed Indore metro will be rapid transit with 10 corridors (5 estimated, 5 planned including one construction) covering 124 km.</li> <li>30 Km of cycling lanes on both side of present BRTS corridor.</li> <li>Proposed 400 Ev buses and 10000 E-riskshaws.</li> </ol>  | 1.     | It is targeted to plant more than 7 lacs trees annually.   |
| <ol> <li>30 Km of cycling lanes on both side of present BRTS corridor.</li> <li>Proposed 400 Ev buses and 10000 E-riskshaws.</li> </ol>  | 2.     | 120 Mw solar power plant in pipeline by Indore Smart City. It will decrease dependency over the fossil fired plants.               |
| 5. Proposed 400 Ev buses and 10000 E-riskshaws.  | 3.     | Proposed Indore metro will be rapid transit with 10 corridors (5 estimated, 5 planned including one construction) covering 124 km. |
|  | 4.     | 30 Km of cycling lanes on both side of present BRTS corridor.  |
| C Deserved 200 electric vehicle charging stations in anting site for sitism also   | 5.     | Proposed 400 Ev buses and 10000 E-riskshaws.   |
| <ol> <li>Proposed 200 electric vehicle charging stations in entire city for citizen also.</li> </ol>   | 6.     | Proposed 200 electric vehicle charging stations in entire city for citizen also.   |
| 7. 600 ton per day composting plant  | 7.     | 600 ton per day composting plant   |

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

| <ul> <li>400 EV buses. 10000 E-riskshaws. 200 charging stations.</li> <li>Organize informal sector non-motorized vehicle operators to provide improved service availability.</li> <li>All Govt. staff vehicles shall be electric.</li> </ul>  | 2022-23 to 2029-30 |
|---|--------------------|
| <ul> <li>100 % installation of smart energy meter for perfect monitoring and transparency of distributed electrical power to all the consumers.</li> <li>Approximately 8 Lakhs smart energy meter will be installed.</li> <li>It is in planning to generate electricity bill by consumer itself and deposit to DISCOM.</li> </ul> | 2022-23 to 2029-30 |
| <ul> <li>7 % of total energy consumption from renewable sources from plants installed in Indore region and<br/>renewable energy supplied in the grid by MP Discom for the city.</li> </ul>  | 2022-23            |

SECTION 3: OUTCOMES

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

| Outcomes  | Date    |
|---|---------|
| Proposed 8 lacs smart energy meter  |         |
|   | 2022-23 |
| Energy efficiency increase measured through power saved with same level of output/performance | 2022-23 |
| Proposed 120 Mw solar power plant   | 2022-23 |
| Proposed 400 EV buses, 10,000 E-riskshaws, 200 charging stations                              | 2022-30 |
|   |         |

#### SECTION 4: REQUIRED RESOURCES AND SUPPORT

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

- INR 5 billion ( 68 million USD ) for renewable energy .
- INR 4 billion ( 55 million USD ) for Smart energy meters .
- INR 4 billon ( 55 million USD ) for EV buses .
- INR 2.5 billion ( 34 million USD ) for E rikshaw.
- INR 5 billion ( 68 million USD ) for charging station.

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.]

| □Financing                | Description   |
|---------------------------|---|
| □ In-Kind<br>contribution | Description   |
| □ Technical Support       | Technical support in 1. Modern and sustainable energy 2. Solar power plant 3. Efficient energy street light |
| □ Other/Please<br>specify | Description   |

**SECTION 5: IMPACT** 

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

At present 25 lacs people will be impacted in the city .

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how <u>each</u> of the actions from section 2 impact advancing the SDGs by 2030.

[up to 500 words, please upload supporting strategy documents as needed]

- 1. Increased proportion of renewable energy in the city will advance the SDG goal of clean energy composition will impact SDG 7.2, (increase substantially the share of renewable energy in the global energy mix) The higher level of use of renewable energy will further the goal of increased share of renewable energy as a direct impact in energy mix in the city.
- 2. Increased non-motorized transport will impact advancement of net zero emissions by reducing considerably the emissions from transport activities. Intra city transport is one of the major sources of emission in the city. Increasing non-motorized transport to 50% will ensure emission reduction considerably.
- 3. Use of energy efficient lights will impact advancing the SDG 7.3 (By 2023, double the global rate of improvement in energy efficiency) Higher efficiency gain will substantially impact the improvement in energy efficiency. While replacement of conventional streetlights will increase the energy efficiency in municipal service sector.

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how <u>each</u> 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]

|   | <mark>Version</mark> | 3 Aug |   |
|---|----------------------|-------|---|
|   |                      | 2.    | Increased use of non-motorized transport for intra city travel to an extent of 50% will reduce emissions from transport sector. This will reduce the local temperature rise, contributing to limiting the global warming within targeted level. Also, the target of net zero emissions by 2050 will be strengthened.<br>Increase of proportion of renewable energy in the overall power mix in the town will reduce dependence on grid power sourced from fossil fuel-based power plants. This will in turn reduce emission from the power plants and hence align with the net zero target of Paris agreement of keeping the global warming under control within the limits of preindustrial level. |
| 1 |                      |       |   |

3. Affordable and reliable energy services provision to all inhabitants and advanced metering infrastructure (AMI) is an integrated system of smart meters.

#### 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.

- Additional renewable energy use will be monitored through tracking the installation level power output monitoring through net metering devices and periodic updates in the reporting system.
- 2. Efficiency gain in the municipal sector (streetlights) will be monitored through monthly power consumption data for same output of illumination.
- 3. The use of non-motorized transport will be tracked through periodic survey of vehicles operating and end user response on usage survey.

#### SECTION 7: GUIDING PRINCIPLES CHECK LIST

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?*  $\square$  Yes  $\square$ No

1.3. 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?  $\boxtimes$  Yes  $\Box$ No

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

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

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

### **SECTION 8: ENERGY COMPACT GENERAL INFORMATION**

8.1. Title/name of the Energy Compact

Energy Compact for Indore , Madhya Pradesh

| 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)                   |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Indore Smart City Development Limited , Indore   |  |  |  |  |  |  |  |
| 8.3. Lead entity type  |  |  |  |  |  |  |  |
| ⊠ Government   | Multilateral body /Intergovernmental<br>Organization |  |  |  |  |  |  |
| □ Non-Governmental Organization (NGO) □ Civil Society organization/Youth   |  |  |  |  |  |  |  |
| □ Academic Institution /Scientific Community<br>□ Private Sector □ Philanthropic Organization  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 8.4. Contact Information   |  |  |  |  |  |  |  |
| Chief Executive officer – 0731-2535572   |  |  |  |  |  |  |  |
| 8.5. Please select the geographical coverage of the Energy Compact<br>□Africa ⊠Asia and Pacific □Europe □Latin America and Caribbean □North America □West Asia □Global |  |  |  |  |  |  |  |
| 8.6. Please select the Energy Compact thematic foc   | us 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.