







Karnataka has programmes for driving energy efficiency (EE) in all sectors, i.e. buildings, industry, municipalities, transport and DISCOMs. In this first Index Karnataka has one of the best performing DISCOMs and is among the top states in the transport sector. The states could focus more on programmes for buildings and industry. Additionally, the state could start tracking the effectiveness and impact of EE programmes using quantitative indicators such as energy intensity and penetration of EE technologies in each demand sector.

BUILDINGS

Karnataka notified ECBC in November 2014 and incorporated ECBC in municipal building bye-laws in 2017. In addition to EESL's UJALA programmes for LED bulbs and EE fans, the state has signed up for the Building Energy Efficiency Programme (BEEP) to retrofit existing buildings with energy efficient appliances. Karnataka provides incentives for replacing electric geysers with solar water heaters. The state has 410 registered green buildings. In terms of next steps, Karnataka could try to capture energy intensity (kWh/m²) and other crucial building energy data such as energy savings. The state could also consider mandating energy audits for commercial buildings.

INDUSTRY

Karnataka works with BEE to enforce the PAT programme for Designated Consumers (DC). 71% DCs in the state met the Specific Energy Consumption (SEC) target for PAT Cycle I. The state could consider mandating energy audits for non-PAT industrial units, as well as providing financial incentives for energy audits and EE projects. Additionally, the state could consider implementing specific EE projects and tracking energy intensity in select MSME clusters.

intensity in select MSME clusters. 100 **KARNATAKA Scores in TPES Group 1** 90 [61% of national TPES] 80 <u>70</u> Buildings <u>60</u> Industry 50 Municipalities 40 30 Transport 20 Agriculture & DISCOM 10 0 Cross Sector

MUNICIPALITIES

Karnataka has implemented LED street lighting through EESL's SLNP scheme and other state programmes like Nagara Jyothi. It has signed up for EESL's MEEP programme for efficient water pumping. Under the MuDSM programme Karnataka replaced 20 pumps in Gulbarga which yielded 32% energy savings. Karnataka could consider setting an energy saving target and tracking the impact of EE programmes in this sector.

TRANSPORT

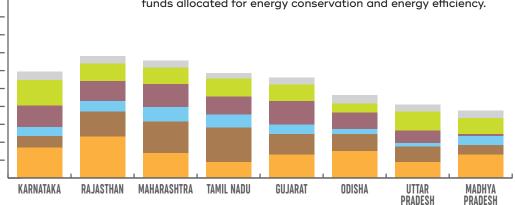
In the first State EE Index the focus was on fuel efficiency of SRTCs and penetration of EVs.

Karnataka conducts awareness programmes on fuel saving for SRTC personnel and its SRTC is among the most fuel efficient. The state is in the lower tier when it comes to penetration of passenger EVs via the FAME scheme. Karnataka was the first state to announce a policy for EVs. The state provides subsidies for EVs and has set an ambitious target to introduce 1000 electric buses in the SRTCs.

AGRICULTURE & DISCOM

Karnataka has among the lowest T&D losses of all states, at 10.5%. The state has notified Demand Side Management (DSM) regulation, and there are DISCOM-driven DSM programmes, like replacement of inefficient agricultural pumps with BEE star rated pumps which is successfully implemented through GESCOM. Both BESCOM and GESCOM have DSM programmes to increase adoption of LED bulbs and EE appliances.

Karnataka Renewable Energy Development Limited (KREDL), is the State Designated Agency (SDA). Though not a dedicated standalone SDA focussing entirely on energy efficiency, it has funds allocated for energy conservation and energy efficiency.





TPES - Total Primary Energy Supply