Summary Analysis - July 2016

Electricity Supply Monitoring Initiative (ESMI) is a program being implemented by Prayas (Energy Group). It aims to improve transparency and provide evidence based feedback about the quality of electricity supply. Under ESMI, specially designed, mobile data enabled monitors are being deployed at each location and supply quality data is published daily at watchyourpower.org. ESMI was selected as a finalist for Google Impact Challenge, India, 2013, given to NGOs using technology for social impact. It was launched in March 2015 and currently covers over 50 districts across India.

This report presents a summary analysis of supply quality data from 167 locations (34 Rural and 133 Urban) for July 2016. This analysis covers three main parameters of supply quality: i) no supply hours, ii) number of interruptions, and, iii) evening hours of supply. The analysis is carried out for mega cities, other cities and rural areas. See notes at the end for more details and explanation.

In July 2016

- 51% ESMI locations experienced outages for more than 15 hours
- 25% ESMI locations experienced more than 30 interruptions each greater than 15 min
- 12% ESMI locations experienced average 30 min of outage during evening hours

Map showing current ESMI Expanse at district level
### Supply Quality in Mega Cities - July 2016

<table>
<thead>
<tr>
<th>Mega City</th>
<th>ESMI locations</th>
<th>Short 15 min-1 hour</th>
<th>Long More than 1 hr</th>
<th>Average no supply hours per location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bengaluru</td>
<td>11</td>
<td>11</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Chennai</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Delhi</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Jaipur</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Kanpur</td>
<td>5</td>
<td>24</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>Nagpur</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Pune</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

### Supply Quality in Other Cities - July 2016

#### Average number of Interruptions per location

- Uttar Pradesh: 67
- Rajasthan: 12
- Maharashtra: 21
- Karnataka: 20
- Haryana: 71
- Bihar: 88

#### Average no supply hours per location

- Uttar Pradesh: 83
- Rajasthan: 38
- Maharashtra: 12
- Karnataka: 21
- Haryana: 31
- Bihar: 108

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**States**

<table>
<thead>
<tr>
<th>States</th>
<th>Cities covered</th>
<th>ESMI locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uttar Pradesh</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Karnataka</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Haryana</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Bihar</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

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Supply Quality in Rural Areas - July 2016

- Analysis in this report covers locations with more than 90% data availability during the month.
- Urban locations are State Capitals, District Headquarters and Other Municipal Areas.
- Mega Cities are urban locations as defined by Central Electricity Authority (typically with population more than 20 lakh).
- Other cities are urban locations that are not mega cities.
- Rural areas are those governed by Gram Panchayats (village councils).
- Agricultural locations covered under ESMI are excluded from this analysis.
- Analysis, except evening hours of supply, consider interruptions of more than 15 minutes.

### ESMI Locations Receiving Entire Six Hours Of Evening Supply

- **32%** Mega Cities
- **25%** Other Cities
- **6%** Rural areas

Evening supply hours considered is between 5 p.m. to 11 p.m. and this analysis ignores upto 2 hours of total evening supply interruptions during the month.

### ESMI Locations

- **Andhra Pradesh**: ESMI locations 4, Average no supply hours 92
- **Bihar**: ESMI locations 4, Average no supply hours 167
- **Goa**: ESMI locations 4, Average no supply hours 19
- **Karnataka**: ESMI locations 4, Average no supply hours 96
- **Maharashtra**: ESMI locations 9, Average no supply hours 38

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**Electricity Supply Monitoring Initiative**

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