All the things we ❤️ and 👍 run on LVDC

We already live in a DC World!
1 in 5 has no access to electricity
The Current War
The Tale of an Early Tech Rivalry

Thomas Edison vs. Nikola Tesla

LVDC Tech
Up To 1500V
## Why LVDC, and why now?

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<thead>
<tr>
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<th>1900s</th>
<th>1960s</th>
<th>2010s</th>
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<tbody>
<tr>
<td>AC and DC</td>
<td>AC Dominates</td>
<td>AC Challenged</td>
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<td>Coexist</td>
<td>Large power plants</td>
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<td>Small power plants</td>
<td>Centralized Power Generation</td>
<td>Decentralized Power</td>
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<td>Localized Power Generation</td>
<td>Coal, Oil, Nuclear fuel</td>
<td>Coal, Oil, Solar</td>
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<td>Coal, Oil, Wood fuel</td>
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<td>1960s</td>
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<tr>
<td>Novelty, Elitist</td>
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<td>Essential Necessity</td>
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<td>Environment or Energy Efficiency; Non-issues</td>
<td>Mainstream, important</td>
<td>Huge impact: Environment and Energy Efficiency</td>
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<td>Tech drivers: AC, DC innovation, Replacing smokey lighting</td>
<td>Tech drivers: AC Systems, high power loads, GLS Lighting</td>
<td>Tech drivers: Electronics, Solar PV, LED Lighting, Batteries</td>
<td>LVDC</td>
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Electricity Access

Active Assisted Living

Internet of Things

Smart Homes

Smart City
Measuring energy access: the multi-tiers

TIER 0: 4HRS
TIER 1: 4HRS
TIER 2: 8HRS
TIER 3: 16HRS
TIER 4: 23HRS

Improving attributes of energy supply leads to higher tiers of access.
LVDC Standards by IEC

- Systems Evaluation Group (SEG) established
  - 125 experts, 26 countries, India leading development
  - Addressing voltage, design, equipment and rules of installation
  - Promoting World Bank’s Multi-Tier Framework

- LVDC Standards work has commenced
- Please join and contribute; IEC has the experts, it needs your ground-level experience (www.iec.ch/seg4)
Thank you