ES1 Demo

ES1

- Load Management
- DC Fast Charge with 2nd life batt
- Market Place Services
- Grid Impact on High Penetration Local Area of EV
- Smart Grid New Functionalities
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Market Place: Roaming

Enel Operation Back-end

Enel Services Back-end

Endesa Customer Roaming on Enel Charging Point

Endesa Services Back-end

Endesa Operation Back-end

Roaming Authorization Request

Roaming Authorization Response

Roaming Authorization Request

Roaming Authorization Response

Enel Customer Roaming on Endesa Charging Point
Grid Impact on Local High Penetration Area of EV
Grid Impact on Local High Penetration Area of EV

<table>
<thead>
<tr>
<th>N</th>
<th>Model</th>
<th>Nominal power</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>AC Enel Charger</td>
<td>3.7 kW</td>
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<tr>
<td>1</td>
<td>Endesa DC EQC50</td>
<td>50 kW</td>
</tr>
<tr>
<td>1</td>
<td>Endesa V2G</td>
<td>10 kW bidirectional</td>
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</tbody>
</table>
Grid Impact on Local High Penetration Area of EV

![Graph showing Total Harmonic Distortion (%)](image)

- THDi Phase 1
- THDi Phase 2
- THDi Phase 3
- Slow charge active power

*Source: Green eMotion*
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2nd life batt + 40kW converter + 50kW Charger
Smart Grid Management Schemes New Functionalities
Thank you for your attention.