Nissan LEAF – Success to Date

• Nissan LEAF Continues to be the best-selling 100% electric vehicle in the U.S. & Globally

• More than **125,000** global sales since launch

• More than **59,000** on U.S. roads today

• LEAF is #1 Nissan retail vehicle sold in Atlanta, Portland, San Francisco & Seattle

• 16 straight months of record sales
LEAF Global Adoption

- Adoption of EV in first 3 years is 2X vs. Hybrid
- Took hybrids 5 years to get where LEAF did in 3 years
What is the current state?

- Cannot look too far down the road – the challenges are right in front of us.
- The industry has made great progress – but we are not close to being done.
- Current Challenges:
  - Sales concentrated in a small number of markets.
  - The Northeast corridor is lagging behind in per-capita EV adoption.
  - Need to accelerate growth in midsize cities that are prime for EV adoption.
  - Significant investments have been made in EV Infrastructure, but more needs to happen quickly.

Long term, sustainable success will come from finding solutions to these and other challenges.

Source: RDA Group Study Jan. 6, 2014
What’s Needed for Sustainable Growth

• Accelerated growth in community fast charging
• Continued workplace charging solutions
• Educate customers on the total value equation
• Larger batteries at similar price points
• Additional model choice
• Utility support
• Federal, state and local government policy support
LEAF Customer Expectations

- Adequate public charging away from home to support driving patterns
- Charging that is quick and convenient
- Free or at a reasonable cost
- Easy to use

Customers need to have reliable convenient charging at 2 of the 3 locations to increase EV adoption
EV Business Development - Workplace

- Establish and sustain relationships with Fortune 500 companies, Universities & other key businesses
- Town halls and Nissan LEAF campus ride and drives
- EV workshops/lunch and learns
- Provide employees with preferred Nissan LEAF pricing
- Support workplace charging across employer facilities
  - Compliment an existing plan, enhance plan or help develop a plan
  - Nissan agnostic with EVSE equipment and primary goal is fulfill Company/Host site wish list
Workplace Charging Initiative
Key Learnings / Best Practices

• Synchronize efforts between Real Estate / Facility / Transportation / Sustainability teams
• Develop a cross-functional team or assign responsibility to a group
• Explore the needs of EV employee drivers to assess what plan works best for the campus – scope Level 2 and DC fast charging options
• Educate on EV etiquette and a Good Neighbor policy – park at a charging station only if you need to charge
• Don’t underestimate the power of signage
• Do your best to not ignore the EV community on campus, whether large or small
Workplace Charging Works!

Average per Month Nissan LEAF Adoption Before & After Nissan EV Workplace Initiative

Almost 9,000 sales can directly be attributed to Workplace efforts!
Drivers Prefer DC Fast Charging

Drivers who charge regularly at home also fast charge whenever possible

-2/3 of LEAF drivers use public infrastructure, 1/4 at least 1x per week

-Fast Charging always preferred except at the workplace

-Time to charge is #1 consideration

-Must be affordable and cost-effective
Nissan DCFC Survey

- Top 5 preferred charging locations:
  1. Shopping malls
  2. Big box retailers
  3. Grocery stores
  4. Public parking lots
  5. Sit down restaurants

- Average charging time at a DCFC is 17 minutes

- Drivers want to travel less than 4 miles to access a charger

- Infrastructure expansion increases likelihood of purchase/repurchase

- Strong 0.75+ correlation between DCFC infrastructure and EV sales

Source: Nissan LEAF owners and intenders survey, Market Intelligence, 2014
More DCFC Product Choice
Evolved Role of the Utility

- Utility strategies to support QC growth have ranged from hands-off to owning/operating equipment
- Demand charges and transformer upgrades continue to be costly challenges:
  - **Charging Hotspots:** multiple 40-50 kW DCFCs/site or 50+ kW DCFCs
- 3 Basic models have emerged among utilities

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<td>TOU Rates / Residential L2 Rate</td>
<td>CAPEX &amp; OPEX Assistance</td>
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<td>Some Cost Assistance (CAPEX)</td>
<td>Active Promotion of the network</td>
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U.S. CHAdeMO DC Fast Charger Growth

Projected
EZ Charge

Launch Markets

- San Francisco
- Sacramento
- San Diego
- Seattle
- Portland
- Nashville
- Phoenix
- Dallas – Ft. Worth
- Houston
- Washington, D.C.
- Los Angeles: 8/14

+14 additional markets by mid-2015
No Charge to Charge

Get 24 months of complimentary charging through the EZ-Charge platform at participating network charging stations with a new Nissan LEAF. (That’s a value of up to $1,012!)*

24 months of complimentary charging at ever growing network of quick chargers

*Offer subject to early termination. Subject to terms and conditions. Individual charging networks comprising the EZ-Charge platform. Availability of chargers not guaranteed and subject to change. Approximate value is $1,012. No substitutions. This EZ-Charge promotion is only available to consumers purchasing vehicles through participating dealers.
Nissan BDM fleet support

Contact your Nissan Electric Vehicle Business Development Manager for support with:

1. Developing an EV fleet strategy
2. Assessing available Nissan financial products
3. Facilitating purchasing through accredited Nissan LEAF dealer
4. Planning for fleet infrastructure requirements

Zero Emission
Case studies: Fleets in practice

City of Seattle: 43 Nissan LEAFs in Fleet

- 17 Reserved for individual users: housing inspectors, parking enforcement, etc.
- 26 LEAFs in Employee Motor Pool
  - All with dedicated L2 charging
  - Accessible to all city employees
  - Easy to use online reservation and key kiosk system
  - High utilization by city employees
- Trial Nissan LEAF with DCFC in 2014
- Savings:
  - 375,000 gas free miles & counting
- Charging Costs:
  - To date paid total ~$9000 in power bills and avg $300/month for 26 LEAFs

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<tr>
<th>Year</th>
<th>Leaf VMTs</th>
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<td>2011</td>
<td>25,068</td>
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<td>2012</td>
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<td>2014 (Feb)</td>
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<td>Total</td>
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*Assuming 40.9 mpg of Hybrid Prius

Source: City of Seattle
Supporting PEV fleet expansion

**Fleet challenges:**

- Lack of information and awareness on EV fleet benefits and cost saving potential
- Uncertain/lengthy buying or bidding processes
- Short-term funding availability vs long-term ROI
- Community infrastructure availability

**Solutions available:**

- Services available to model savings and manage/finance fleets
- Nissan’s dedicated EV Business Development Managers support buying process
- NMAC fleet leases including $7,500 tax credit pass-through for tax exempt organizations
- EZ-Charge, Nissan community DC Fast Charging network, and workplace charging programs
High-level of industry engagement to achieve joint infrastructure goals

All parties need to work together for sustainable growth
Thank you