The 101 on Electric Vehicles in Minnesota

December 1, 2020
1:00pm - 2:00pm CT

Drive Electric MINNESOTA

Plug In America

Xcel Energy

SUSTAINABLE GROWTH COALITION

Technology Reminders:

- Please type any questions into the chat - questions are welcome!
- All attendees will be muted and have their videos turned off.
- The presentations and recordings will be available on the Plug In America website.

Drive Electric MINNESOTA

Plug In America

Xcel Energy

SUSTAINABLE GROWTH COALITION

Minnesotans Going Electric

A Free Six-Part Webinar Series

December 1-4, 2020

1. **The Role of Cities and Counties in the Shift to Transportation Electrification**
   - December 1, 2020 11:00am - 12:30pm CT
2. **The 101 on Electric Vehicles in Minnesota**
   - December 1, 2020 1:00pm - 2:00pm CT
3. **Experience Electric Vehicles in a Virtual Test Drive**
   - December 1, 2020 2:15pm - 3:00pm CT
4. **How Minnesota Can Lead on Transportation Electrification in 2021**
   - December 3, 2020 10:00am - 12:00pm CT
5. **Economic Development Opportunities for MN from the Transportation Electrification Sector**
   - December 3, 2020 1:00 - 2:30pm CT
6. **Expanding Charging for MN Fleets, Workplaces, Multi-Unit Dwellings and Public Locations**
   - December 4, 2020 10:00am - 12:00pm CT

Minnesotans Going Electric

Thank you to our partners!

Drive Electric MINNESOTA

Elk River Municipal Utilities

American Lung Association. Clean Air Choice.

ZEF ENERGY
Building a Zero Emissions Future

CONNEXUS ENERGY

MCEA

DEPARTMENT OF TRANSPORTATION

COMMERCE DEPARTMENT

SHIFT 2 ELECTRIC

SIERRA CLUB

COALITION for CLEAN TRANSPORTATION

Alliance for Transportation Electrification

Union of Concerned Scientists

Minnesotans Going Electric

Thank you to our partners!

GREAT RIVER ENERGY

DAKOTA ELECTRIC ASSOCIATION
Your Touchstone Energy® Cooperative

METROPOLITAN COUNCIL

Plug In America

greenlots
A Member of the Shell Group

Fresh Energy

Xcel Energy

OTTER TAIL POWER COMPANY

SUSTAINABLE GROWTH COALITION

GREAT PLAINS INSTITUTE
Better Energy. Better World.

minnesota power
AN ALLETE COMPANY

MINNESOTA POLLUTION CONTROL AGENCY

MMUA

Southern Minnesota Municipal Power Agency

Minnesotans Going Electric

A Free Six-part Webinar Series

December 1-4, 2020

Register at

https://www.driveelectricmn.org/webinar-series-minnesotans-going-electric/

Drive Electric MINNESOTA

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MINNESOTA SUSTAINABLE GROWTH COALITION

Our Speakers:

Brendan Jordan
Lead Facilitator
Drive Electric Minnesota

Katherine Stainken
Policy Director
Plug In America

Jukka Kukkonen
Chief EV Educator
Shift2Electric

Kevin Schwain
Director of Program Strategy & Development
Xcel Energy

Lisa Thurstin
Coordinator
Twin Cities Clean Cities Coalition & Senior Manager, American Lung Association

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Speaker Bios

- **Brendan Jordan** is the VP of Transportation and Fuels programs at **Great Plains Institute**, and the lead facilitator for **Drive Electric MN.**
- **Katherine Stainken** is Policy Director for **Plug In America**. Prior to her work at Plug In America, Katherine was a Director of Government Affairs at the Solar Energy Industries Association (SEIA), focused on policies to promote solar on the federal level as well as southeast and northeast regions, along with regulatory work at federal agencies. Katherine was also the chief liaison to the solar heating and cooling and EH&S groups at SEIA. She is former Fulbright and Thinkswiss scholar.
- **Jukka Kukkonen** is Chief EV Educator for **Shift2Electric** and teaches EV Market and Technologies at the University of St Thomas. He is also EV Expert for Fresh Energy and coordinates the Minnesota EV Owners group.
- **Kevin Schwain** is the Director of Program Strategy & Development at **Xcel Energy.** In this role, Kevin develops pilots and programs that help customers save money and reduce the impact of their energy usage. Kevin has been with Xcel Energy since 2008 and previously held leadership positions with Target Corporation, Advanced Technology Materials, and Hewlett Packard.
- **Lisa Thurstin** is **Twin Cities Clean Cities Coalition** coordinator and senior manager of the **American Lung Association** in Minnesota Clean Air Choice program. Lisa, has served as the TC4 coordinator since 2007 and worked on alternative fuel and advanced technology development activities in Minnesota and across the upper Midwest since 2001. She has managed a variety of large DOE funded projects with EV focus including Midwest EVOLVE, Twin Cities EV Community and the COOL EVs project.

Agenda:

1:00	Welcome	Brendan Jordan	Drive Electric MN
1:03	EV basics	Katherine Stainken	Plug In America
1:13	MN Experience	Jukka Kukkonen	Shift2Electric
1:23	Charging EVs & Utilities	Kevin Schwain	Xcel Energy
1:33	Engagement	Lisa Thurstin	EV Driver, Twin Cities Clean Cities Coalition
1:39	Virtual Test Drive	Katherine Stainken	Plug In America
1:43	Q&A		
1:58	Closing	Brendan Jordan	Drive Electric MN

Drive Electric MINNESOTA

Plug In America

Xcel Energy

SUSTAINABLE GROWTH COALITION

Plug In America®

WE DRIVE ELECTRIC. YOU CAN TOO.

101 on EVs in Minnesota

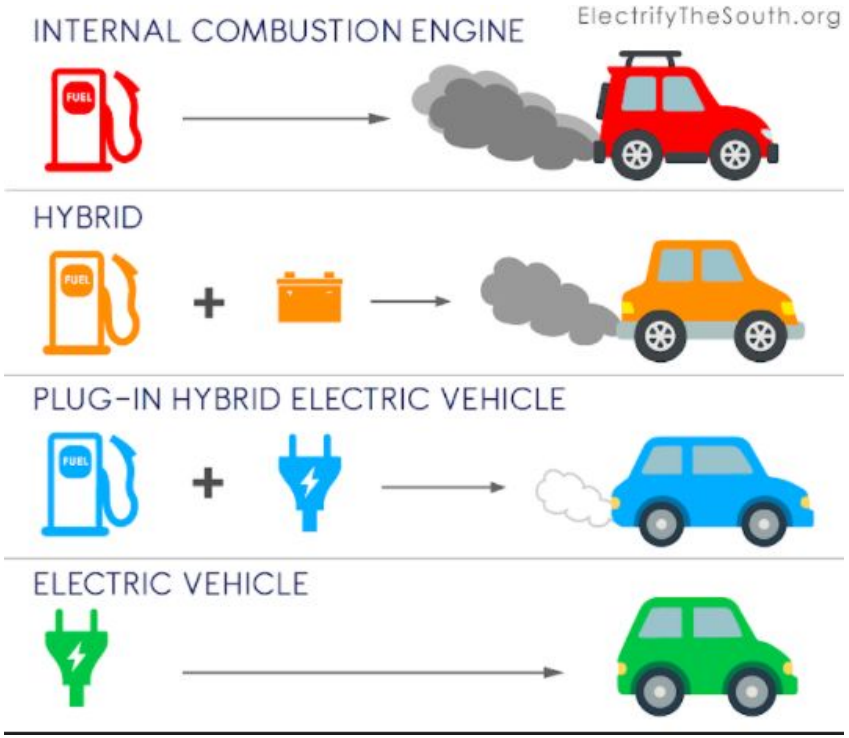
December 1, 2020

Katherine Stainken, Policy Director

Who we are

- **<u>The voice of the EV consumer</u>** – in Minnesota and nationwide
- 501c3 nonprofit founded in 2008
- Our members represent the world's deepest pool of experienced EV drivers
- Two core areas:
  1. Policy and Advocacy
  2. Education and Outreach
     - PlugStar: dealers, consumers, utilities
     - National Drive Electric Week and Drive Electric Earth Day

Definitions



Makes and Models of EVs available TODAY

All Electric Vehicles
sorted by electric range

Tesla Model S
$85,000 and up
310 miles and up

Tesla Model X
$88,000 and up
270 miles and up

Tesla Model 3
$42,900
264 miles and up

Chevrolet Bolt EV
$36,620
238 miles

Jaguar I-PACE
$69,500
234 miles

BMW i3
$44,450
153 miles

Nissan LEAF
$29,990
150 miles

Volkswagen e-Golf
$30,495
125 miles

Hyundai Ioniq Electric
$30,315
124 miles

Ford Focus Electric
$29,120
115 miles

Kia Soul EV
$33,950
111 miles

Honda Clarity Electric
$199/mo. lease only
89 miles

Fiat 500e
$32,995
84 miles

Smart EQ fortwo
$23,900
58 miles

Plug-In Hybrid Vehicles
sorted by electric range

BMW i3 REX
$48,300
153 / 200
electric / total miles

Chevrolet Volt
$33,520
53 / 420
electric / total miles

Honda Clarity Plug In
$33,400
48 / 340
electric / total miles

Chrysler Pacifica Hybric
$39,995
32 / 520
electric / total miles

Cadillac CT6 Plug In
$75,095
31 / 430
electric / total miles

Hyundai Ioniq Plug In
$25,350
29 / 630
electric / total miles

Kia Optima Plug In
$35,390
29 / 610
electric / total miles

Ford Fusion Energi
$34,595
26 / 610
electric / total miles

Kia Niro Plug In
$28,500
26 / 560
electric / total miles

Toyota Prius Prime
$27,350
25 / 640
electric / total miles

Mitsubishi Outlander
$34,595
22 / 310
electric / total miles

Volvo S90 T8 Plug In
$63,650
21 / 410
electric / total miles

Volvo XC90 T8 Plug In
$64,950
19 / 380
electric / total miles

Volvo XC60 T8 Plug In
$52,900
18 / 370
electric / total miles

BMW i8
$147,500
18 / 320
electric / total miles

Subaru Crosstrek Hybri
$34,995
17 / 480
electric / total miles

Porsche Panamera Hybrid
$99,600
16 / 480
electric / total miles

Audi A3 e-tron
$39,500
16 / 400
electric / total miles

BMW 530e Plug In
$53,400
16 / 370
electric / total miles

Porsche Cayenne Hybric
$79,900
14 / 490
electric / total miles

Plug-In Hybrid Vehicles
sorted by electric range

BMW 330e Plug In
$45,600
14 / 350
electric / total miles

BMW 740e Plug In
$91,250
14 / 340
electric / total miles

Mini Cooper SE Plug
$36,800
12 / 280
electric / total miles

Mercedes GLE 550e
$66,700
10 / 460
electric / total miles

Mercedes C 350e
$47,900
9 / 410
electric / total miles

Plug In America

Where to charge

LEVEL 1 STANDARD OUTLET

- Plug into a standard 120V wall outlet
- Connector provided with every EV
- Great for overnight or workplace charging
- Ideal for typical commutes (up to 40 miles)

40 miles overnight

LEVEL 2 240 VOLT OUTLET

- Faster charging for longer drives
- Provides a full charge for most EVs in:

100% Electric — **4-8 hours** empty to full charge

Electric & Gas — **1-2 hours** empty to full charge

25 miles per hour of charging

DC FAST CHARGE

- Much faster charging at public locations
- 3 different connectors depending on vehicle:

CCS Combo — **65 miles** in 20 minutes

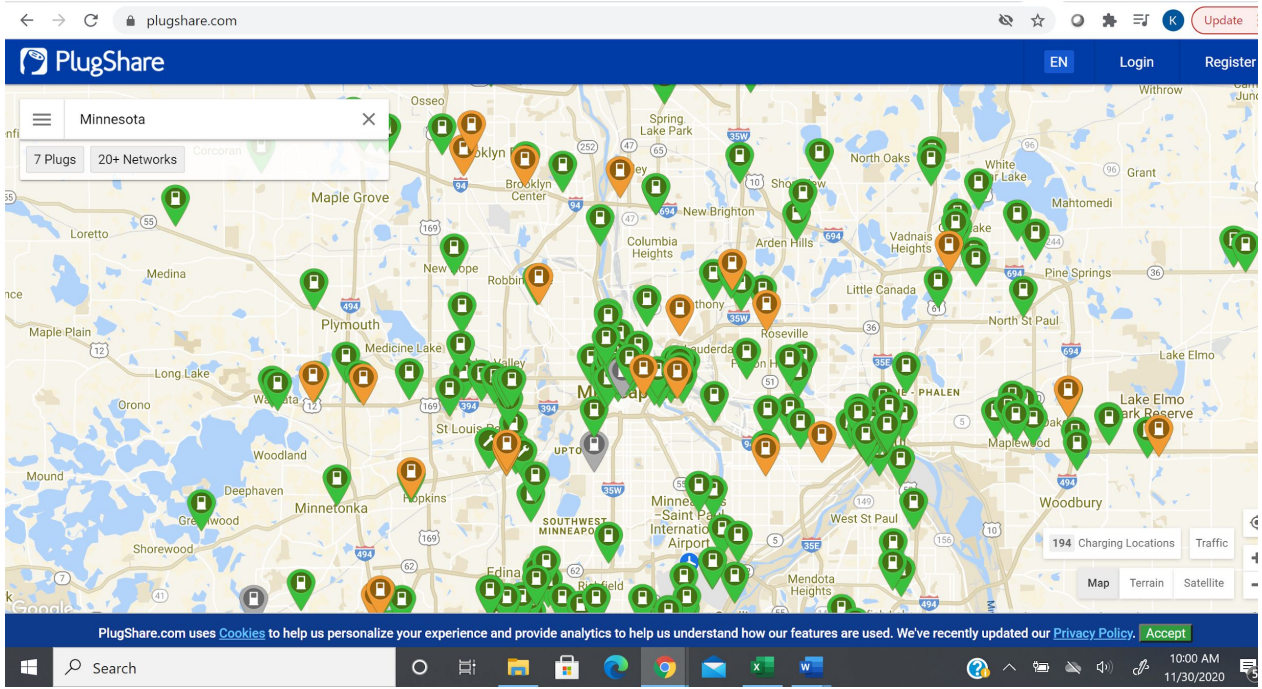
CHAdeMO — **67 miles** in 30 minutes

Tesla Supercharger — **130+ miles** in 20 minutes

0 to 80% 30-40 minutes

*Can be much faster depending on if 50kW or 350kW station

Charging Apps



- Plugshare
- Chargepoint
- EVgo
- Blink
- Greenlots
- Volta
- Electrify America
- Tesla
- ...and more!

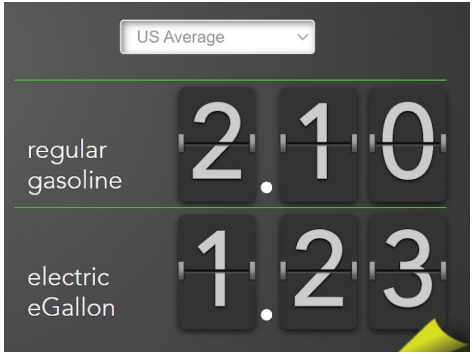
Benefits for Consumers

Affordability

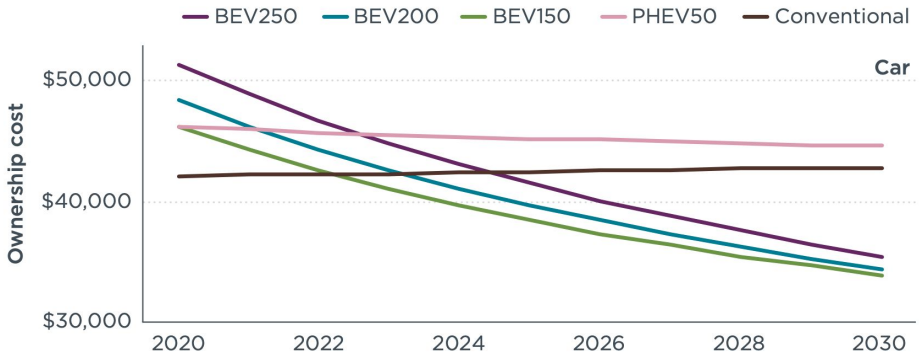
Average maintenance / repair costs over vehicle lifetime:

- BEV: $0.03/mile
- PHEV: $0.03/mile
- ICE: $0.06/mile

Consumer Reports



Convenience



Courtesy of ICCT

Benefits for Consumers

Performance

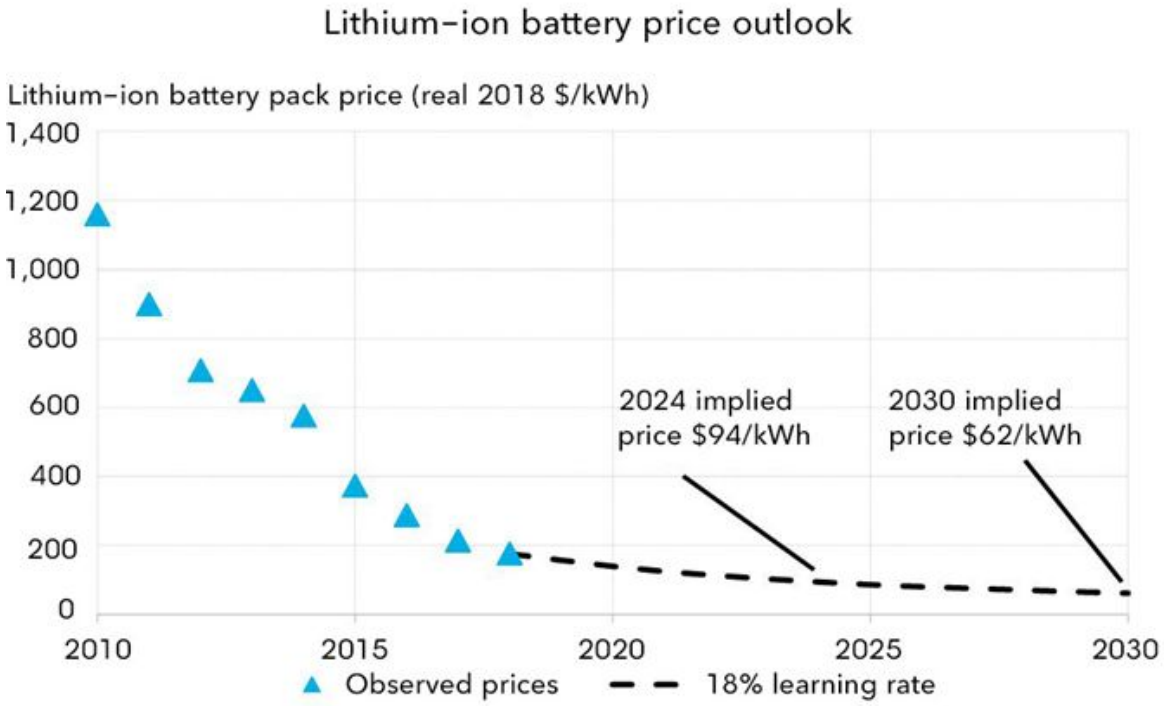
Benefits for Consumers

Environmental Stewardship

Air Quality

National Security

Battery Prices are Falling

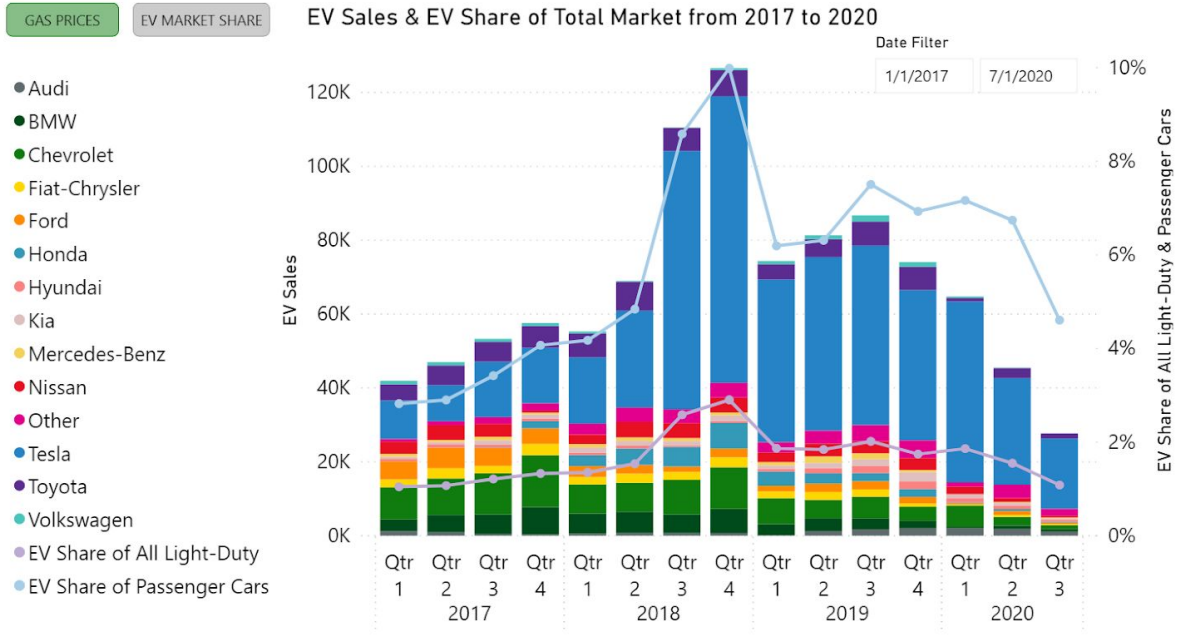


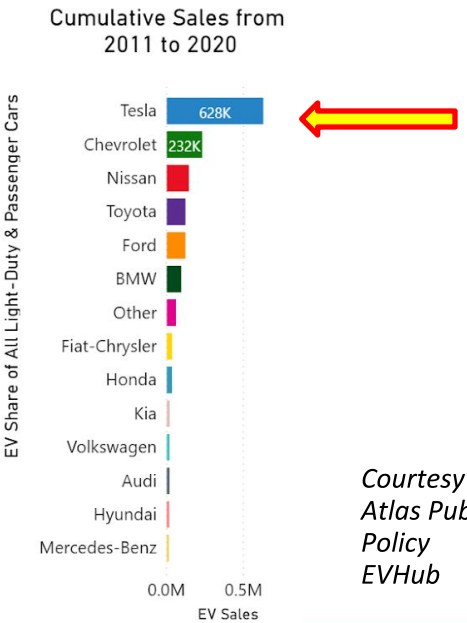
Source: BloombergNEF

Nationwide Sales

Cumulative Sales from 2011 to 2020

1,571,404	984,669	586,735	70 Models	24 Makes
EV Sales	BEV Sales	PHEV Sales	EV Models	EV Makes

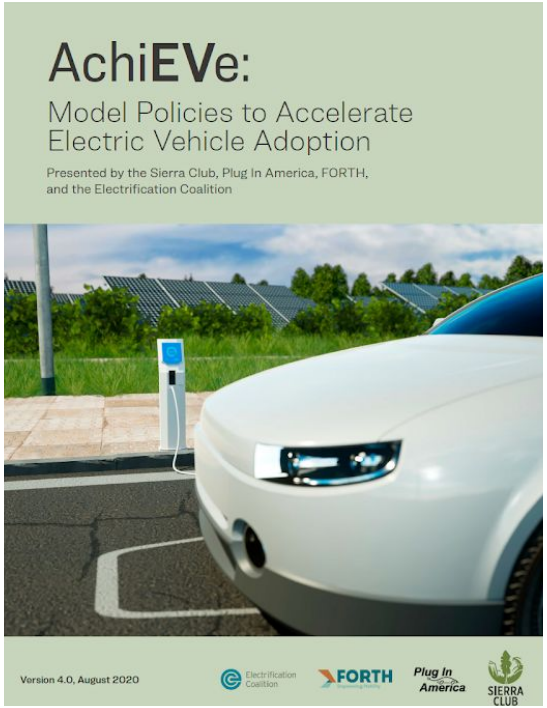




Courtesy of Atlas Public Policy EVHub

AchiEVe: Transition to EVs Model Policy Toolkit

- Collaboration between PIA, Sierra Club, Electrification Coalition, Forth Mobility
- Designed for 6 key stakeholder groups:
  - Legislators; Governor's offices / state agencies; transit agencies; cities and local government, businesses; regulators & utilities
- Various categories of policies
  - Enable vehicle purchase
  - Increase charging infrastructure
  - Prioritize equity and expand access
  - Electrify fleets
  - And more!



Other ways to get involved….

- National Drive Electric Week
  - Sept. 25 – Oct. 3, 2021
  - driveelectricweek.org
- Drive Electric Earth Day
  - April 2021
  - driveelectricearthday.org

United States National Online Events

Event	Day(s)
New EVs - First Look	Sep 29, 2020
Home EV Charging Station Installation Walk Through	Sep 27, 2020
EV Battery Recycling/Reuse	Oct 02, 2020
NDEW Kick-Off Event	Sep 24, 2020
EV Batteries: Straight Talk Edition	Sep 28, 2020
Find Your Perfect Match: EV Speed Dating	Sep 27, 2020
EV Trivia Happy Hour	Sep 29, 2020
The Policies Driving EV Adoption Forward	Oct 01, 2020
An EVening of Electrified Classic Cars	Sep 30, 2020
Electrify Your Ride to School	Oct 01, 2020
EVs and Solar: Driving on Sunshine	Sep 29, 2020
EV Myth Busting: Fact vs Fiction	Sep 28, 2020
Electric Cars and Vehicle to Grid Technology	Sep 28, 2020
EVs and Charging at the Workplace	Sep 30, 2020
EVs for All: Making EV Ownership More Inclusive	Oct 02, 2020
15 Events	

ohio Search

Here is information on 14 events that may interest you. You can RSVP to attend any of these events.

Local Online Events

Columbus, OH Sep 30, 2020	Topics Driving Experience Environmental Benefits *Other*	RSVP
Columbus, OH Oct 03, 2020	Topics Driving Experience Local Public Charging EV 101	RSVP
Lexington, KY Oct 04, 2020	Topic *Various*	RSVP
Erie, PA Erie, Pennsylvania Sep 26, 2020	Topics Cost of Ownership Driving Experience EV 101	RSVP
Louisville, KY Oct 03, 2020	Topic *Various*	RSVP

Local In-Person Events

Columbus, OH Sep 26, 2020	Topics Driving Experience EV 101 Local Public Charging	RSVP
Perrysburg, OH The Town Center at Levis Commons Sep 26, 2020	Topic *Various*	RSVP
Avon Lake, OH Avon Lake Public Library Sep 26, 2020	Topic *Various*	RSVP
Independence, OH Independence Court Parking Lot Sep 29, 2020	Topic *Various*	RSVP
Cleveland, OH West Side Market Parking Lot Sep 30, 2020	Topic *Various*	RSVP
Windsor, ON Green Sun Rising / Renewable Energy technology Centre Sep 26, 2020	Topic *Various*	RSVP

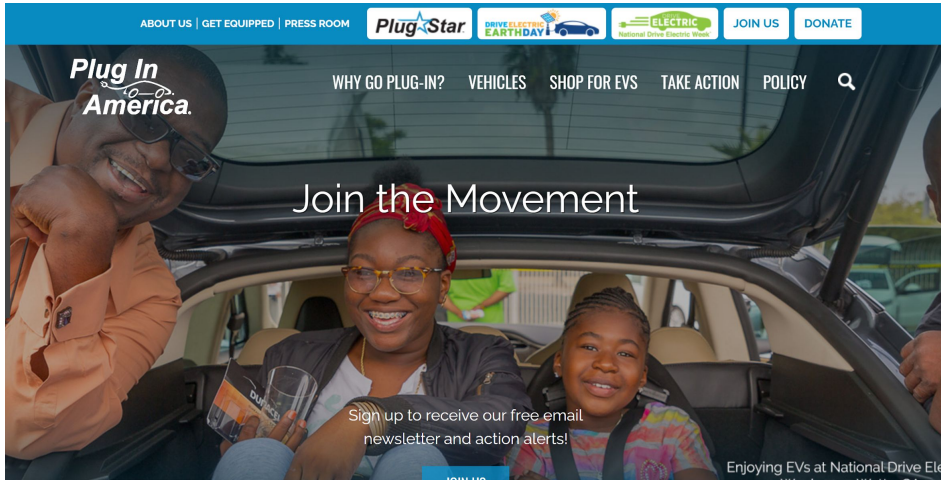
Thank you!

Katherine Stainken

Policy Director

kstainken@pluginamerica.org

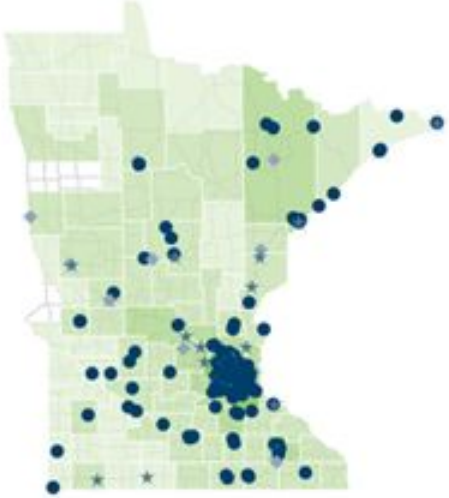
www.pluginamerica.org



SHIFT2 ELECTRIC

Electric Vehicles in Minnesota

Jukka Kukkonen
Shift2Electric
jukka@Shift2Electric.com



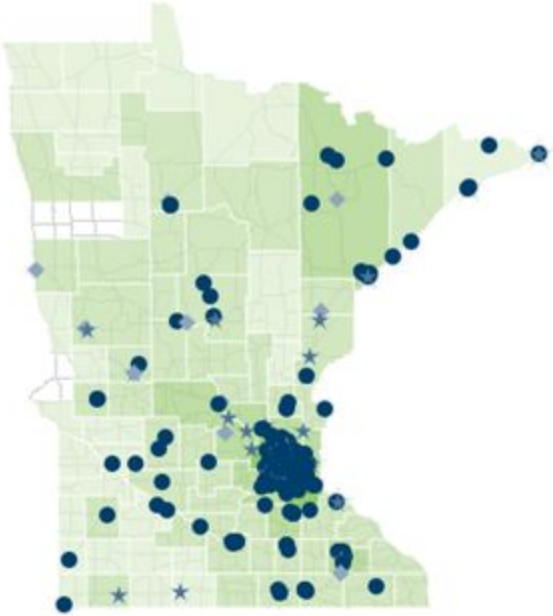
Models available in Midwest

Photo: Jukka Kukkonen

Shift2Electric.com

DEPARTMENT OF TRANSPORTATION

Electric Vehicle Dashboard



Charging stations

Level 2 charger	DC fast charger	Total
824	187	1,011

Total vehicles per Level 2 charger	Total vehicles per DC fast charger
18	77

Vehicles

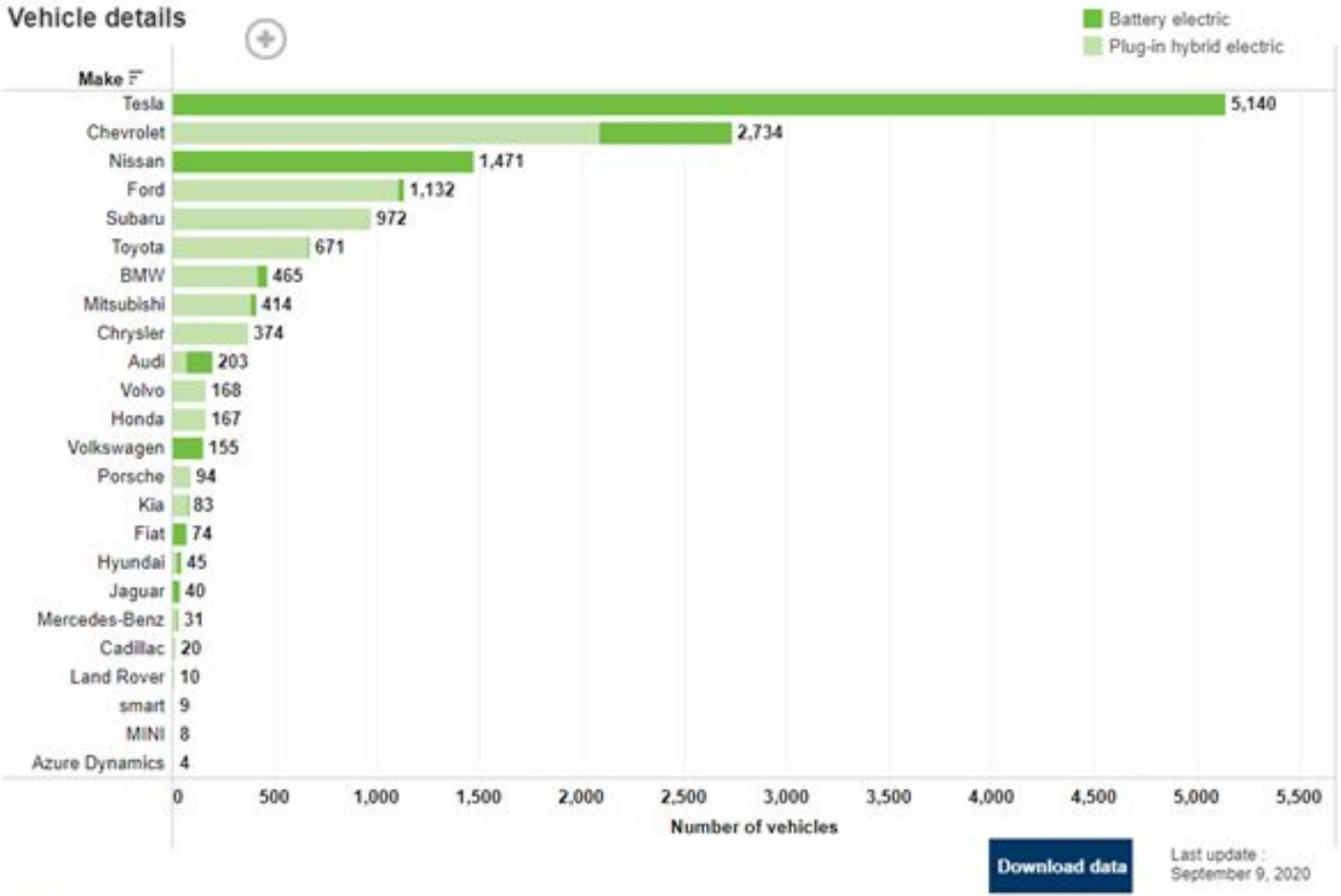
Battery electric vehicles (BEV)	Plug-in hybrid electric vehicles (PHEV)	Total
7,808	6,676	14,484

Source: MN DOT

Shift2Electric.com

DEPARTMENT OF TRANSPORTATION

Electric Vehicle Dashboard



Source: MN DOT

Shift2Electric.com

MN EV Owners

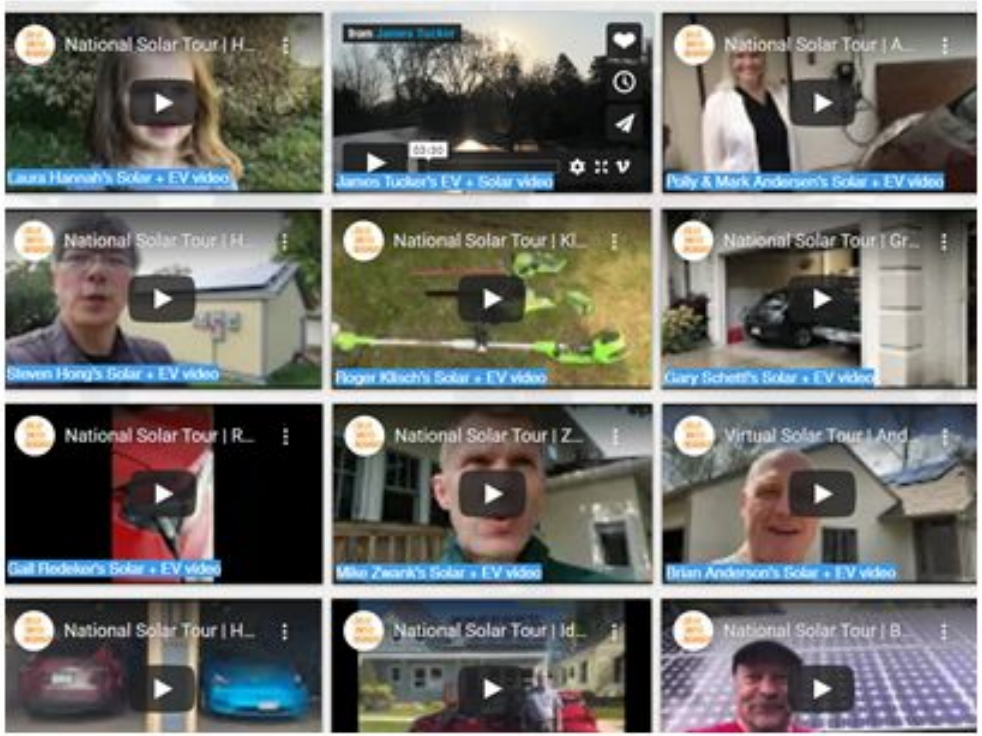
- Started 2012
- Over 2000 members
- Meetings, events, experience sharing

www.MNEVOwners.org

Facebook.com/groups/mnevowners

EV Experience Gallery

(www.MNEVOwners.org)



Shift2Electric.com

Midwest EV Info List (March 2020) Page 1 of 3

Manufacturer										Range			Charging speed (miles/hr)			Performance				
Make	Model	Photo	Seating	EV Type	FWD/ RWD/ AWD	Base MSRP	Federal tax credit	Price after federal tax credit	Battery size (kWh)	Electric Range (miles)	Total Range (miles)	Charging rates (kW) L2/DCFC	Level 1 120V	Level 2 240V	DCFC 400+V	MPGe/ MPG	Top Spd (mph)	0-60 mph (sec)	Towing capacity (lbs)	Crash Ratings: IIHS/NHTSA
Audi	e-tron		5	BEV	AWD	$74,800	$7,500	**$67,300**	95	204	204	11/130	3	24	228	74	155	5.5	4000	Top Safety Pick +/ Not rated
Audi	Q5 e		5	PHEV	AWD	$52,900	$6,712	**$46,188**	14.1	20	390	7.4	2	14	N/A	65/27	130	5	4400	Good/ Not rated
Audi	A8L PHEV		5	PHEV	AWD	$94,000	$6,795	**$87,205**	14.1	17	420	7.4	2	12	N/A	54/23	130	4.9	0	Not Rated
BMW	i3		4	BEV	RWD	$44,450	$7,500	**$36,950**	42	153	153 (200)	7.4/50	4	27	147	124 (39)	93	6.9-7.2	0	Good-Acceptable/ Not rated
BMW	i8		4	PHEV	AWD	$147,500	$3,793	**$143,707**	7.2	15	330	3.3	3	7	N/A	76/28	155	4.2	0	Not rated/ Not rated
BMW	X3 xDri																		)	Top Safety Pick + / Not rated
BMW	5Si																		)	Top Safety Pick + / Not rated
BMW	745e		5	PHEV	AWD	$95,550	$5,836	**$89,714**	12	16	290	3.7	2	6	N/A	56/22	155	4.9	0	Not rated / Not rated
Chevrolet	Bolt EV		5	BEV	FWD	$36,620	$1,875	**$34,745**	66	259	259	7.2/50	4	25	140	118	98	6.5	0	Top Safety Pick / 5 star
Chrysler	Pacifica Hybrid (PHEV)		7	PHEV	FWD	$39,995	$7,500	**$32,495**	16	33	570	6.6	3	16	N/A	84/32	107	7.8	0	Top Safety Pick / 5 star
Ford	Fusion Energi		5	PHEV	FWD	$35,000	$4,609	**$30,391**	9	26	610	3.3	3	9	N/A	97/42	85	8.5	0	Good/ 5 star
Honda	Clarity PHEV		5	PHEV	FWD	$33,400	$7,500	**$25,900**	17	48	340	6.6	4	22	N/A	110/42	110	8.8	0	Not rated/ Not rated
Jaguar	I-PACE		5	BEV	AWD	$69,850	$7,500	**$62,350**	90	246	246	7.0/85	3	16	153	76	124	4.5	0	Not rated
Kia	Niro PHEV		5	PHEV	FWD	$28,500	$4,543	**$23,957**	8.9	26	560	3.3	4	10	N/A	105/46	107	9	0	Top Safety Pick + / 4 star

This table is updated by Jukka Kukkonen, Shift 2 Electric. Photos and information sources: Manufacturers' websites and www.fueleconomy.gov Get the latest version: www.EVInfoList.com

www.EVInfoList.com

Shift2Electric.com

Vehicle availability

- EV availability at dealers is generally very poor
- 1 Ford Fusion Energi (PHEV)
  vs.
  278 Fusion ICE or hybrid
- 5 Toyota Prius Prime
  vs.
  136 Toyota Prius

Make and Model	Number of dealers in MN	New vehicles at dealers
Audi e-tron		25
Audi Q5 e		4
Audi A8L PHEV	4	1
BMW i3		0
BMW X5 xDrive40e		0
BMW 330e		2
BMW 530e		0
BMW 745e	3	0
Chevrolet Bolt EV	95	95
Chrysler Pacifica Hybrid (PHEV)	64	28
Ford Fusion Energi	82	1
Honda Clarity PHEV	13	0
Jaguar I-PACE	2	9
Kia Niro PHEV	10	8
Mercedes- Benz GLC350e	4	0
Mini Cooper S E	1	0
Mitsubishi Outlander PHEV	4	82
Nissan Leaf	15	15
Porsche Panamera S E-hybrid		2
Porsche Cayenne S E-hybrid		3
Porsche Taycan	2	14
Tesla Model 3		Well available
Tesla Model S		Well available
Tesla Model Y		Well available
Tesla Model X	2	Well available
Toyota Prius Prime	17	5
Volvo S60 T8		0
Volvo S90 T8		2
Volvo XC60 T8		0
Volvo XC90 T8	2	0
Total	320	296
All light duty vehicles at MN dealers		43069

Data: Cars.com

Shift2Electric.com

2020 Fusion Plug-in Hybrid Titanium

$4609 Tax Credit!

$35,000	109/97	5	$449/mo

2020 Fusion Titanium

View Local Inventory

Build & Price

$34,450	21/31	5	$438/mo

	2021 Toyota **Prius Prime LE** 1.8L 4-Cyl. ECVT Hybrid	2021 Toyota **Prius** LE FWD	2021 Toyota **Corolla Hatchback** SE AT
— COLLAPSE ALL	CHANGE VEHICLE	CHANGE VEHICLE	CHANGE VEHICLE
Estimated Combined (MPGe)	133 BEST	52	35
MSRP	$28,220	$25,735	$21,665

Federal tax credit −$4,502

$23,718

Shift2Electric.com

MNEVBuyer.com

MN EV BUYER

Get e-news | Charging | Economics | EV Sales Savvy | Questions?

Info for EV buyers in Minnesota.

All about charging | Economics | Connect with your utility company

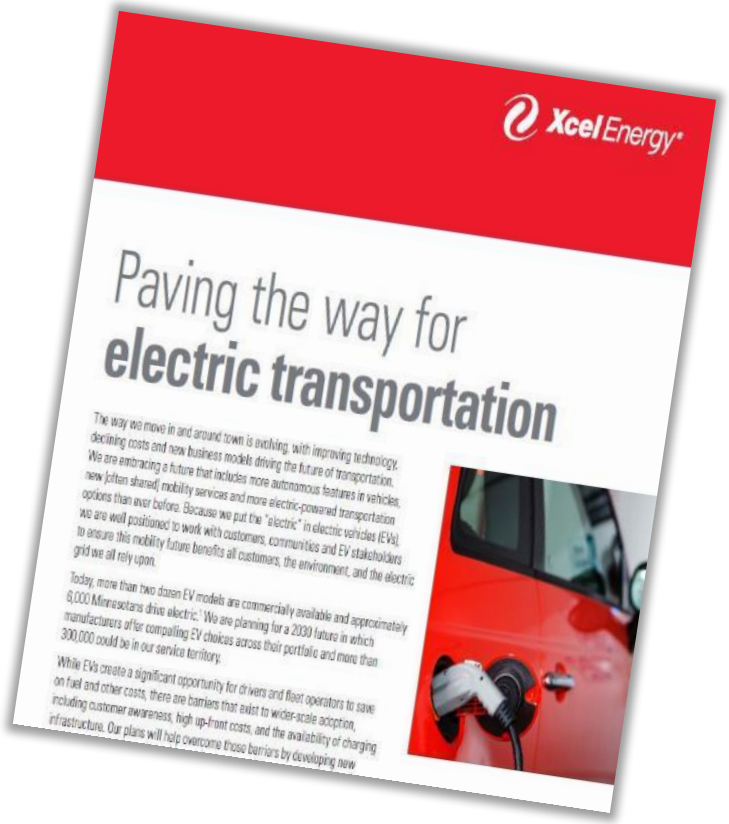
This site is brought to you by Fresh Energy and SHIFT2 ELECTRIC

Shift2Electric.com

Xcel Energy®

Electric Vehicles

Our EV Plan



Xcel Energy

Paving the way for electric transportation

The way we move in and around town is evolving, with improving technology, declining costs and new business models driving the future of transportation. We are embracing a future that includes more autonomous features in vehicles, new [often shared] mobility services and more electric-powered transportation options than ever before. Because we put the "electric" in electric vehicles (EVs), we are well positioned to work with customers, communities and EV stakeholders to ensure this mobility future benefits all customers, the environment, and the electric grid we all rely upon.

Today, more than two dozen EV models are commercially available and approximately 6,000 Minnesotans drive electric.[1] We are planning for a 2030 future in which manufacturers offer compelling EV choices across their portfolio and more than 300,000 could be in our service territory.

While EVs create a significant opportunity for drivers and fleet operators to save on fuel and other costs, there are barriers that exist to wider-scale adoption, including customer awareness, high up-front costs, and the availability of charging infrastructure. Our plans will help overcome those barriers by developing new

Focus on 3 Market Segments:

Home Charging

Charging for Fleet Operators

Public Fast Charging

Key Barriers to Address:

- Lack of Awareness and Information
- Initial upfront costs
- Suboptimal incentives to charge when energy costs are lowest

Our Company-Wide EV Vision

1.5 MILLION EVs

On the road in the areas we serve by 2030, replacing gas-powered models

That's **20% of all vehicles**, a **30-fold** increase in EVs

$1 BILLION

In customer fuel savings annually by 2030

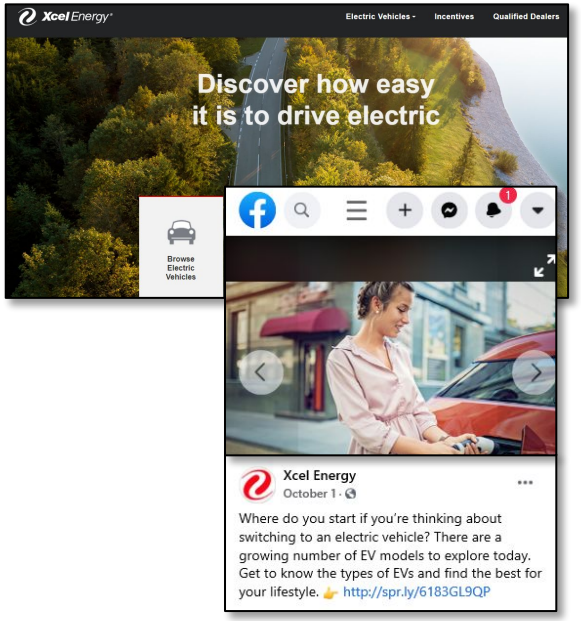
An EV would cost **$700 less per year** to fuel than a gas-powered car

5 MILLION TONS OF CARBON EMISSIONS

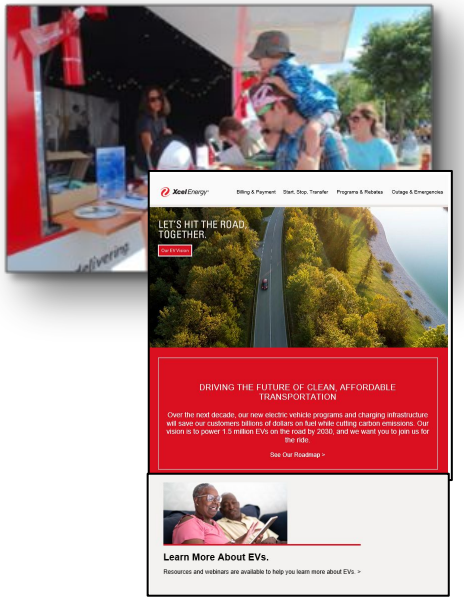
Eliminated annually by 2030 with our clean energy

That's about **3 tons of carbon reduction** per vehicle

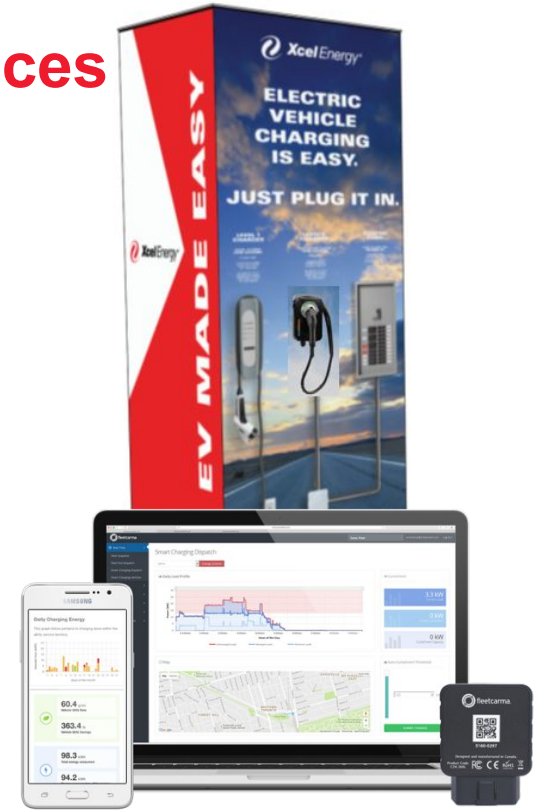
Increasing awareness with advisory services



Awareness

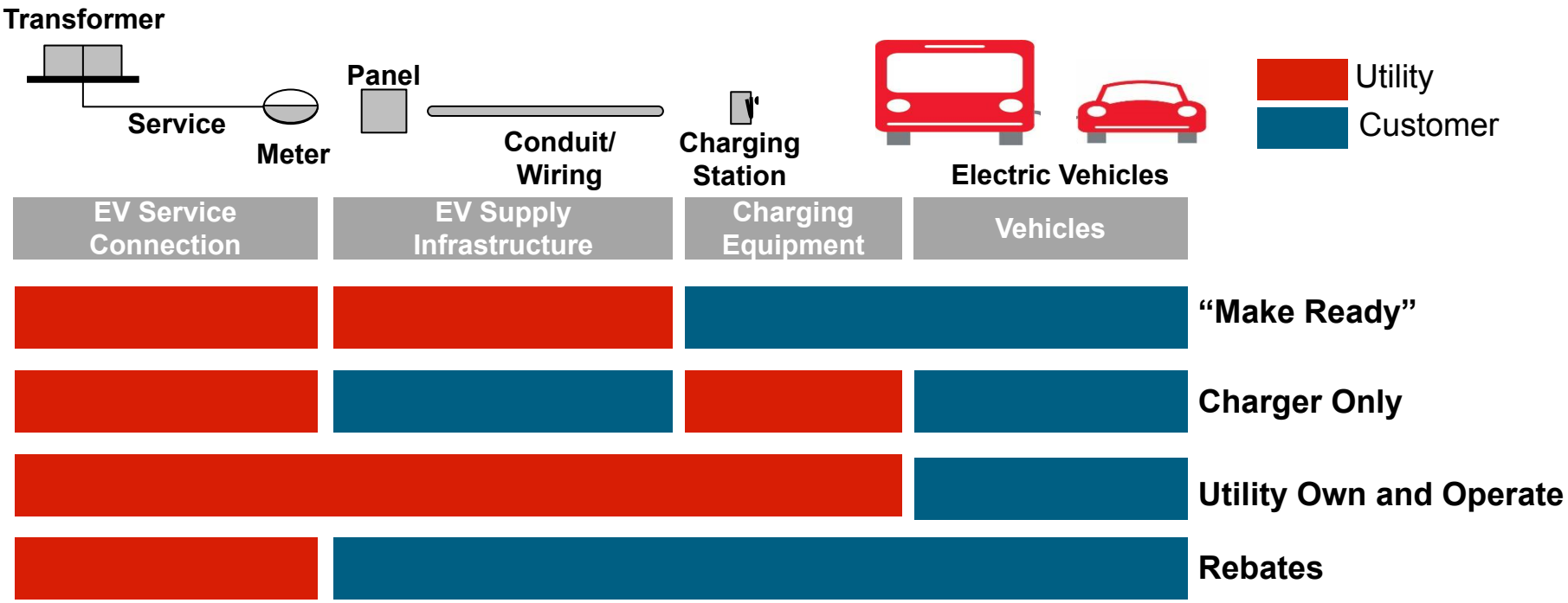


Outreach



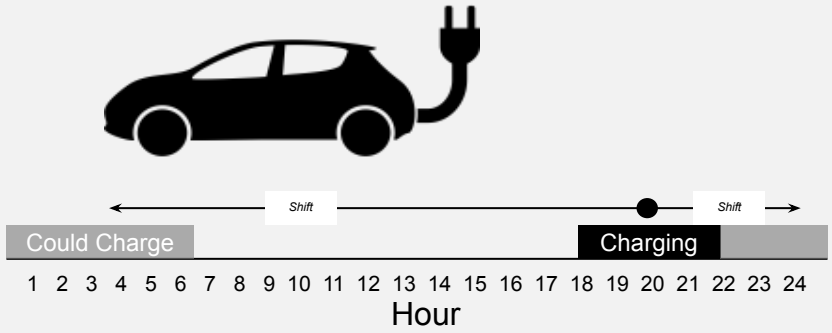
Education

Increasing access by lowering upfront costs



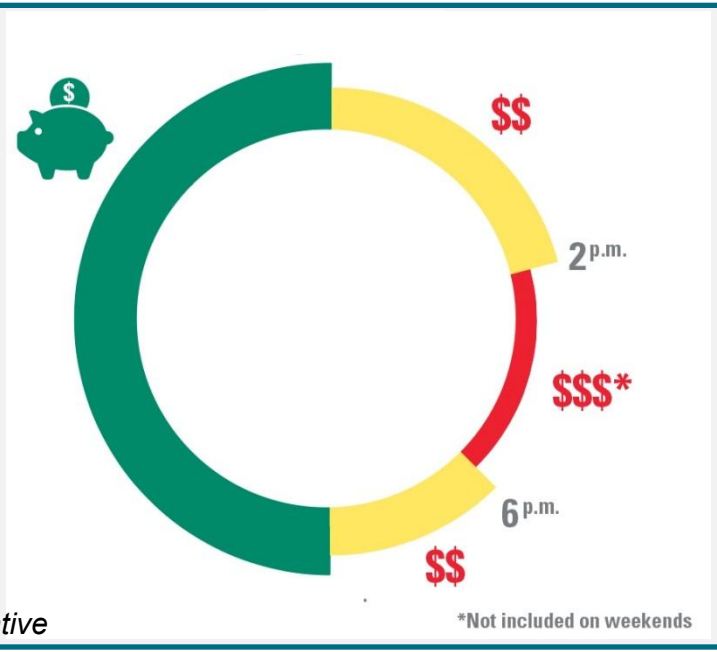
Reducing customer bills with optimization

Smart Charging



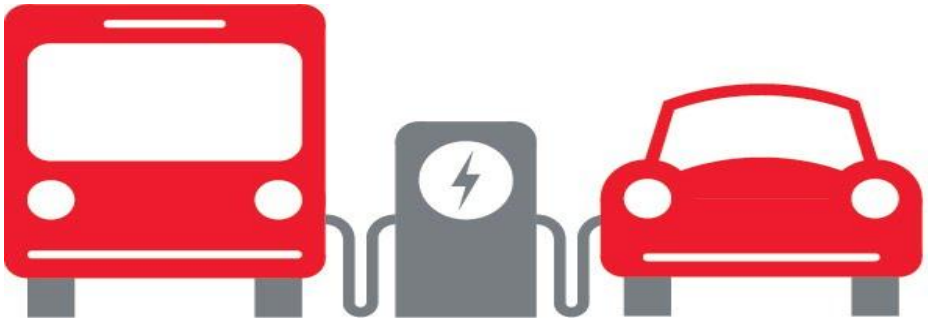
Illustrative

Time of Use Pricing



Illustrative

Why focus on fleets?

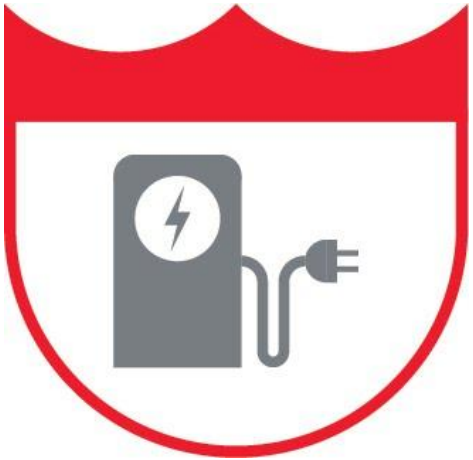


Objective:
Provide new services aimed at reducing total cost of ownership and system costs

Rationale:

- **Size of fleets**
- **Focus on economics**
- **Opportunity to support first-movers**
- **Potential evolution in mobility services that will rely more on fleets**
- **Pilot approaches and establish key learnings that can be scaled to other market segments**

Why focus on public fast charging?



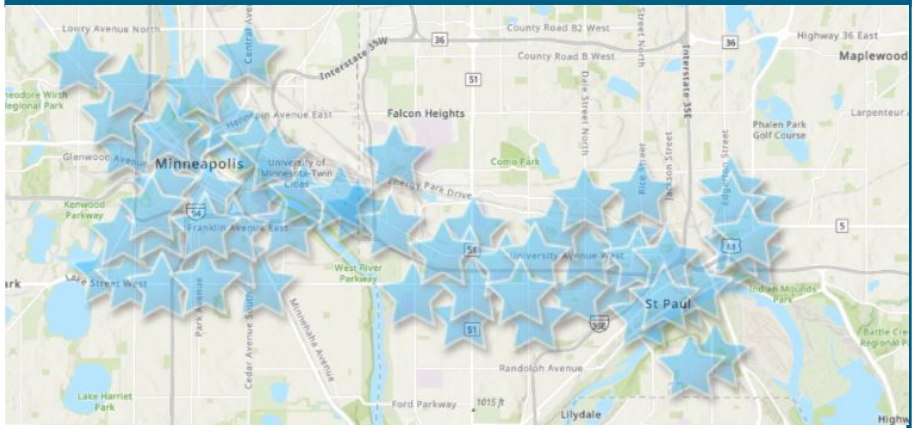
Objective:
Increasing fast charging infrastructure to reduce “range anxiety”

Rationale:

- **Address range anxiety**
- **Support longer distance driving**
- **Provide a charging solution for those who can’t charge at home**
- **Make up for lack of infrastructure**
- **Standalone economics for fast charging have generally been insufficient to drive required investment**
- **Potential evolution in mobility services that will rely more on sharing**

Public Charging Pilot

Community Charging Hubs



We are partnering with communities, charging network providers, and shared mobility companies to help customers:

- Access new, low-cost mobility services
- Provide sufficient network coverage for shared mobility, while also enabling public charging
- Lower upfront costs for building out network by providing Make Ready services
- Locate vehicles and charging infrastructure in diverse communities

HOURCAR

Minneapolis
City of Lakes

SAINT PAUL

American Lung Association.

Clean Air Choice.

Twin Cities Clean Cities Coalition — The Alternatives Are Clear

The 101 on EVs for Minnesota: The Future of Transportation is Electric

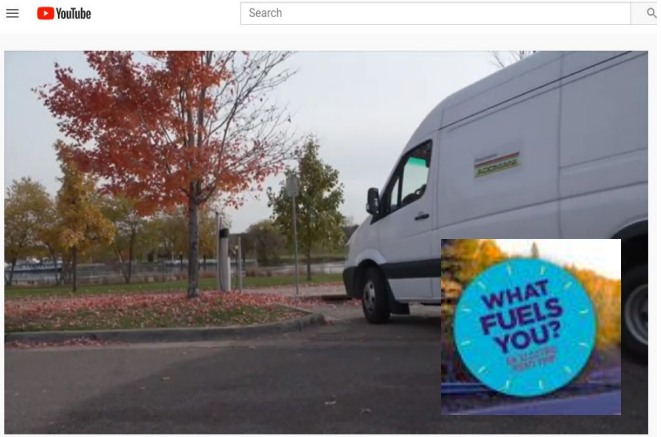
Engagement in Community and Partners to Accelerate EVs

Lisa Thurstin | Senior Manager

651.223.9568 | lisa.Thurstin@lung.org

Engagement

Michigan 2 Montana: National Alternative Fuel Corridor | MotorWeek Auto World



AMERICAN LUNG ASSOCIATION
Medium and Heavy Duty 100% EVs are Here!

Virtual, In-person & Hybrid Engagement

Resources

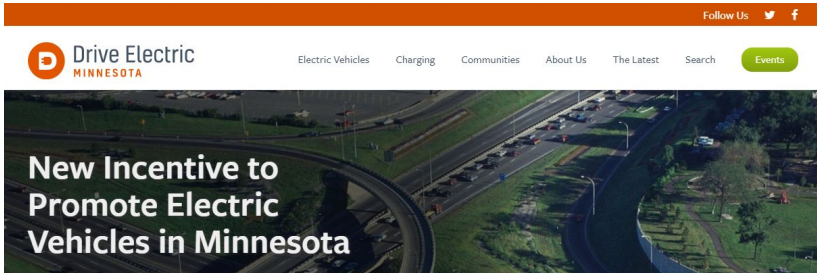
Midwest EV Info List (October 2020) Page 1 of 3

Midwest EVOLVE

Manufacturer										Range			Charging speed (miles/hr)			Performance				
Make	Model	Photo	Seating	EV Type	FWD/ RWD/ AWD	Base MSRP	Federal tax credit	Price after federal tax credit	Battery size (kWh)	Electric Range (miles)	Total Range (miles)	Charging rates (kW) L2/DCFC	Level 1 120V	Level 2 240V	DCFC 400+V	MPGe/ MPG	Top Spd (mph)	0-60 mph (sec)	Towing capacity (lbs)	Crash Ratings: IIHS/NHTSA
Audi	e-tro																		4000	Top Safety Pick +/ Not rated
Audi	e-tron Sp																		4000	Top Safety Pick +/ 5 star
Audi	Q5																		4400	Good/ Not rated
Audi	A8L P																		0	Not Rated
BMW	i3																		0	Good- Acceptable/ Not rated
BMW	X3 xDrive30e		5	PHEV	AWD	$49,600	$5,836	**$43,764**	12	18	340	3.7	2	7	N/A	60/24	130	5.9	0	Top Safety Pick + /
BMW	X5 xDrive45e		5	PHEV	AWD	$65,400	$7,500	**$57,900**	24	31	400	3.7	2	7	N/A	50/2				
BMW	330e		5	PHEV	WD/ AW	$44,550	$5,836	**$38,714**	12	23	320	3.7	3	8	N/A	75/2				
BMW	530e		5	PHEV	RWD/ AWD	$57,200	$5,836	**$51,364**	12	21	350	3.7	3	8	N/A	69/2				
BMW	745e		5	PHEV	AWD	$95,900	$5,836	**$90,064**	12	16	290	3.7	2	6	N/A	56/2				
Chevrolet	Bolt EV		5	BEV	FWD	$36,620	$0	**$36,620**	66	259	259	7.2/50	4	25	140	118				
Chrysler	Pacifica Hybrid (PHEV)		7	PHEV	FWD	$38,100	$7,500	**$30,600**	16	33	570	6.6	3	16	N/A	84/3				

www.EVInfoList.com

Midwest EV Info List (Updated 10/2020)
US EV Info List (Updated 10/2020)



American Lung Association.

Call Our Help Line
Ask a Question

Lung Health & Diseases | Quit Smoking | Clean Air | Research & Repo

Home > Clean Air > Road to Clean Air - Electric Vehicle Report

Electric Vehicle Report

The Road to Clean Air

The transportation sector is a leading contributor to both climate change and air pollution. With nearly half of Americans living with unhealthy air, and climate change making it harder to protect public health today, "The Road to Clean Air" report highlights the potential for major public health and climate change benefits through a robust nationwide transition to electric vehicles.

DOWNLOAD REPORT

Consumer Vehicle Purchase Guidance Tool:

EVolution-informing your choice for a smart purchase

EVOLUTION: EDUCATION ON E-DRIVE VEHICLES

https://evolution.es.anl.gov

Is an electric vehicle a smart consumer choice? Absolutely! But first you need the facts about EVs and how they relate to your driving needs. The EVolution consumer choice tool is here to help.

So, what are the benefits of owning an electric vehicle?

Better Energy Efficiency | Better for your Wallet | Better for the Environment

Click here to learn more

Argonne NATIONAL LABORATORY

Electric Vehicles: What You Need to Know!

How to provide EV charging for condominium and apartment buildings Guide/Worksheets

www.mudcharging.com

Midwest EVOLVE™

Virtual Test Drive

Plug In America

Closing Reminders:

Recordings available here:
https://pluginamerica.org/policy/webinar-series-minnesotans-going-electric/

- Plug In America
  - www.pluginamerica.org
  - Dean Taylor, Senior Policy Advisor: dtaylor@pluginamerica.org
- Drive Electric Minnesota
  - www.driveelectricmn.org
  - info@driveelectricmn.org
- Xcel Energy
  - www.xcelenergy.com
- Sustainable Growth Coalition
  - https://environmental-initiative.org/work/sustainable-growth-coalition/
  - Amy Fredregill, Managing Director: afredregill@en-in.org

Drive Electric MINNESOTA

Plug In America

Xcel Energy

SUSTAINABLE GROWTH COALITION