DIRECT TESTIMONY

OF

JEFF MARTIN

Case Nos.
EO-2019-0067 (lead)
EO-2019-0068 (consolidated)
ER-2019-0199 (consolidated)

Q: Please state your name and business address.

A: My name is Jeff Martin. My business address is 818 South Kansas Avenue, Topeka, Kansas 66612.

Q: By whom and in what capacity are you employed?

A: I am employed by Westar Energy, Inc. ("Westar") and serve as Vice President, Customer and Community Operations for Westar, Kansas City Power & Light Company ("KCP&L") and KCP&L Greater Missouri Operations Company ("GMO"), the operating utilities of Evergy, Inc. ("Evergy").

Q: On whose behalf are you testifying?

A: I am testifying on behalf of KCP&L.

Q: What are your responsibilities?

A: As the VP of Customer and Community Operations in the Marketing and Public Affairs Department, I am responsible for leading 34 professionals that directly interact with our largest Commercial and Industrial customers and our communities that we have the honor of serving.

Q: Please describe your education, experience and employment history.

A: I have a Bachelor of Science in Electronic Engineering Technology degree from Pittsburg State University and a Masters of Business Administration degree from Kansas State

KCPL Exhibit No. 1
Date 8-27-19 Reporter BJT
File No. EO-2019-0067
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ER-2019-0199

University. I have been with Westar for over twenty-five years and have held various positions in Field Operations, Information Technology, Regulatory Affairs and the last 10 months with Evergy in Marketing and Public Affairs.

Q: Have you previously testified in a proceeding at the Missouri Public Service Commission ("MPSC" or "Commission") or before any other utility regulatory agency?

A: Yes. Although I have not testified before the MPSC, I have testified before the Kansas Corporation Commission.

Q: What is the purpose of your testimony?

A: The Staff of the Commission ("Staff") has recommended a disallowance of approximately $350,000 for KCP&L because Staff found no evidence that KCP&L attempted to sell RECs prior to their expiration.[1] In my direct testimony I will (1) provide background information on Renewable Energy Credits ("RECs"), (2) explain my understanding of the basis of Staff's disallowance, (3) explain KCP&L's practices and rationale regarding the sale of RECs and (4) explain why the Commission should not adopt Staff's disallowance recommendation.

(1) BACKGROUND INFORMATION ON RENEWABLE ENERGY CREDITS

Q: What are RECs?

A: The Renewable Energy Standard (sometimes referred to as the "RES") was enacted as sections 393.1020 to .1030 RSMo. in 2008 and requires electric utilities to provide a certain portion of the electricity they sell to Missouri consumers from renewable energy resources. For the period of time that is the subject of this case (January 1, 2017 through June 30, 2018), KCP&L was required under the RES to provide no less than 5% (for the

period January 1, 2017 through December 31, 2017) and 10% (for the period January 1, 2018 through June 30, 2018) of its electricity sales from renewable energy resources, with at least 2% of each portfolio requirement derived from solar energy.[2] Compliance can be attained, in whole or in part, by purchasing RECs. A REC constitutes evidence that a unit of energy has been generated by a renewable resource, can be used or retired only once to comply with the RES and, if unused, a REC may exist for up to three years after the date of its creation.[3] A REC is a financial instrument that can be purchased or sold within markets established for the trade of RECs.

(2) STAFF'S DISALLOWANCE BASED ON RECs

Q: WHAT IS YOUR UNDERSTANDING OF THE BASIS OF THE DISALLOWANCE RECOMMENDED BY STAFF?

A: According to Staff:

> Staff did find evidence of imprudence by KCPL's management of its RECs during the Review Period. Staff could not find that KCPL took any action that would have allowed it to generate revenue from 722,628 RECs that were not needed to satisfy its RES compliance and were simply allowed to expire during the Review Period. Staff recommends the Commission issue an Ordered Adjustment ("OC") in the amount of $350,351 which is equal to 722,628 RECs times Staff's estimated average sales price of $0.48483 per REC during the 18-month Review Period.[4]

Based on this language, it is my understanding that Staff believes it was unreasonable for KCP&L not to have sold 722,628 RECs during the period January 1, 2017 through June 30, 2018 and that customers have been harmed by the absence of related revenues totaling $350,351. Consequently, Staff recommends that the Commission order a disallowance of this amount.

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[1] See Staff Report filed on February 28, 2019 in Case No. EO-2019-0068, p. 25.
[2] Section 393.1030.1 RSMo.
[3] Section 393.1030.2 RSMo.

(3) KCP&L's Practices and Rationale Regarding the Sale of RECs

Q: HAS KCP&L SOLD RECs?

A: No.[5] The revenue opportunity presented by the potential sale of RECs, net of associated costs, is very limited and is outweighed by the fact that our customers are interested in renewable energy and in renewable energy being a key component of their energy usage.

Although not directly on point to the REC-based disallowance Staff has recommended, KCP&L has explored the advisability of developing programs to offer customers, through Commission-approved tariff sheets, involving the sale of RECs obtained through third parties. The first such consideration occurred in 2012 but KCP&L decided to postpone those efforts after observing the issues raised by Staff and other parties in Case No. EO-2013-0317 in connection with Ameren's Pure Power tariff. Although Ameren ultimately prevailed in that case, KCP&L did not have a clear need for such a program at that time. Our customers were simply not seeking to purchase RECs. More recently, as part of the planning for KCP&L's 2018 general rate case (Case No. ER-2018-0145), we reviewed renewable programs deployed by other utilities, including REC sale programs. Ultimately, we chose to propose a Renewable Energy Rider and a Solar Subscription Pilot Rider, deeming them more appropriate to pursue than a tariffed REC sale program based, in part, on the fact that there are now sources other than KCP&L for our customers to obtain RECs.

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[4] See Staff Report filed on February 28, 2019 in Case No. EO-2019-0068, p. 25.

[5] Although GMO sold RECs in 2008, organizational changes over the passage of time have not allowed KCP&L to gain an understanding of the rationale for those sales and neither GMO nor KCP&L has sold RECs since that time.

Q: UPON WHAT EVIDENCE DO YOU RELY FOR YOUR ASSERTION THAT KCP&L CUSTOMERS ARE INTERESTED IN RENEWABLE ENERGY AND IN RENEWABLE ENERGY BEING A KEY COMPONENT OF THEIR ENERGY USAGE?

A: A number of our larger customers have announced corporate goals to reduce their carbon footprint by making greater use of renewable energy resources for the power that they consume. In addition, customer surveys undertaken on behalf of KCP&L show more broadly that our customers value KCP&L's ability to demonstrate that a key component of the power KCP&L sells to retail customers is provided from renewable energy resources.

Q: CAN YOU PROVIDE EXAMPLES OF LARGER KCP&L CUSTOMERS WHO HAVE ANNOUNCED GOALS RELATED TO RENEWABLE ENERGY RESOURCES?

A: Yes. The City of Kansas City, Missouri ("KCMO") recently announced that it had cut greenhouse gas emissions by 40 percent below year 2000 levels, surpassing its goal of a 30-percent reduction by 2020.[6] A substantial portion of this reduction in greenhouse gas emissions can be attributed to KCP&L's increased use of renewables.[7] In addition, through Resolution 190233, the KCMO City Council has authorized the City Manager to enter into the Company's Renewables Direct program (Rate Schedule RER) to aid in KCMO's efforts to procure 100% of their municipal electricity from carbon-free

[6] See Schedule JM-1
https://greenabilitymagazine.com/blog/2018/10/kansas-city-surpasses-greenhouse-gas-reduction-goal/
[7] See Schedule JM-1, p. 2.

sources.[8] In 2010 Ford Motor Company established a goal to reduce greenhouse gas emissions, per vehicle produced, by 30% by 2025. Ford announced that it exceeded that objective in 2017, eight years early.[9]

Walmart, Sprint, McDonalds, IKEA and several additional national companies that have operations in Missouri and/or Kansas have signed on to the Corporate Renewable Energy Buyers' Principles which lays out six tenets for how these companies can meet their corporate sustainability goals to increase the use of renewable energy through regulation and working with utilities like KCP&L and GMO.[10]

Q: CAN YOU PROVIDE EXAMPLES OF CUSTOMER SURVEYS THAT DEMONSTRATE THE INTEREST OF KCP&L CUSTOMERS IN RENEWABLE ENERGY PRODUCTS AND RENEWABLE ENERGY BEING A KEY COMPONENT OF THE ENERGY THEY USE?

A: Yes. When asked in June 2018 how likely they were to participate in a solar program, without the need to install solar panels, if offered by KCP&L at a cost of $5-$10 per month, more than half of the Missouri customer members of KCP&L's Customer Advisory Panel said they would be "likely" or "somewhat likely" to take that service.[11]

Customer Advisory Panel members were also asked their thoughts on solar power and the results showed that: 34% of Missouri panel members have considered solar but did not install it due to cost: 24% cannot add solar at their homes but would consider a

[8] See Schedule JM-2
http://cityclerk.kcmo.org/liveweb/Documents/Document.aspx?q=lUw9rGP8yU%2Fun%2BoMaVT%2BW%2FiBm4HXf%2FcNsH90%2B45ZqXAct0fxezFa%2FlpSrAMGHZ6m3Q9fftnPjbYUT7rKCZekUg%3D%3D
[9] See Schedule JM-3.
[10] See Schedule JM-4.
[11] See Schedule JM-5, p. 1.

shared solar program; 16% would like to add solar panels to their homes; and 3% have already installed solar panels. Only 5% indicated no interest in solar power.[12]

Customers who express an interest in joining the Customer Advisory Panel were asked to indicate the number along a seven-point scale that best describes their concern for and steps to protect the environment. 32% said they are very concerned about the environment compared to 2% who say they have very little concern.[13]

When asked "If you knew that nearly 50% of KCP&L's electricity is produced from non-carbon sources, is ranked among the top 5 for largest wind fleets, and has the largest energy efficiency portfolio in Missouri. Does this information give you a more favorable or less favorable impression of KCP&L?" 78% of those surveyed said "More Favorable" and 8% said "Less Favorable."[14]

When asked "KCP&L is committed to providing clean, affordable energy that's why they have added renewable energy sources like wind, solar, biogas and hydro power to their generation. They were the first utility in the country to own and operate a commercial-scale wind facility in the state of Kansas with our 100.5 megawatts Spearville Wind Generation Facility, which is now 148.5 megawatts. Additionally, we currently have two wind projects underway – Rock Creek and Osborn- which we expect to contribute an additional 500 MW, bringing our total renewable energy to a projected nineteen percent of our energy mix. Has this information given you a more favorable impression of KCP&L?" In March 2018, 76% responded "More Favorable" and 11% responded "Less Favorable".[15]

[12] See Schedule JM-5, p. 1.
[13] See Schedule JM-5, p. 2.
[14] See Schedule JM-6, p. 1.
[15] See Schedule JM-6, p. 2.

Q: UPON WHAT EVIDENCE DO YOU RELY FOR YOUR ASSERTION THAT THE REVENUE OPPORTUNITY PRESENTED BY THE POTENTIAL SALE OF RECs, NET OF ASSOCIATED COSTS, IS VERY LIMITED?

A: Although I believe the disallowance recommended by Staff – approximately $350,000 for an 18-month period – is overstated for a variety of different reasons, even on the overstated basis presented by Staff it represents less than one-tenth of 1% of KCP&L's total Missouri FAC-related costs of approximately $455 million in base and FAC rates for that period of time.

Q: WHY DO YOU BELIEVE STAFF'S DISALLOWANCE RECOMMENDATION IS OVERSTATED?

A: Staff fails to include any expenses associated with REC sales and assumes that all the revenues from REC sales can be used to offset other FAC costs. This is clearly unreasonable. For example, there is a transfer fee of $0.01 that would be incurred for each REC sold.[16] This unavoidable incremental cost associated with REC sales would reduce the amount of money available to offset FAC costs by $7,226, requiring Staff's disallowance to be reduced to $343,125. In addition, the provisions of KCP&L's FAC tariff flow only 95% of the variance between FAC costs included in base rates and actual FAC costs through the FAC mechanism to customers with the remainder being absorbed or retained by shareholders. In the case of REC revenues, 5% of the revenues would be retained by KCP&L. Thus, operation of the FAC tariff would reduce the disallowance by 5% to $325,969. These two simple and necessary adjustments reduce Staff's disallowance to $325,969. Staff's disallowance also fails to consider the cost of internal

[16] See Schedule JM-7.

administrative work (accounting, tax, etc.) that would be required to manage REC sales which would further reduce the net benefits to customers.

The number of RECs used by Staff to calculate its recommended disallowance – 722,628 – is based on the number of RECs that expired during the period under review (January 1, 2017 through June 30, 2018). Had KCP&L sold 722,628 RECs during this period, it could only have conclusively demonstrated that it generated 2,382,360 MWh (or 19% of the energy sold to retail customers) from renewable energy resources, considerably lower than the 3,104,988 MWh (or 24.77%) KCP&L could demonstrate by not selling the RECs. And as described before, our customers want as much renewable energy as we can provide. Had we sold these RECs, then the amount of renewable power delivered to our customers would have been less because we cannot double count sold RECs as delivered energy to our customers. By not selling the subject RECs, therefore KCP&L's action is consistent with and supportive of the ability to prevent double-counting that is included in the Corporate Renewable Energy Buyers' Principles: Increasing Access to Renewable Energy.[17]

Q: WHY DOES THE VALUE CUSTOMERS PLACE ON KCP&L's ABILITY TO CONCLUSIVELY DEMONSTRATE THAT IT PROVIDES A KEY COMPONENT OF THE ELECTRICITY IT SELLS RETAIL CUSTOMERS FROM RENEWABLE ENERGY RESOURCES OUTWEIGH THE REVENUES THAT COULD POTENTIALLY BE GENERATED THROUGH THE SALE OF RECs?

A: A variety of data clearly show that many of our customers are interested in reducing greenhouse gas emissions and, by implication, increasing the amount of energy KCP&L

generates from renewable energy resources relative to the amount of power generated by fossil fuels. Given the minimal potential net revenue opportunity presented by REC sales, it is reasonable for KCP&L to retain RECs until they expire, without selling them, in order to demonstrate conclusively that KCP&L has generated as much power from its renewable energy resources as it can in any given year.

(4) STAFF's REC-BASED DISALLOWANCE IS UNREASONABLE

Q: IS STAFF'S RECOMMENDATION TO DISALLOW APPROXIMATELY $350,000 ON ACCOUNT OF KCP&L'S DECISION NOT TO GENERATE REVENUES THROUGH THE SALE OF RECs REASONABLE?

A: No. KCP&L has based its decision not to generate revenues through the sale of RECs on the desires of its customers. KCP&L is in regular contact with its customers and seeks to satisfy their objectives, in whole or in part, when it is feasible to do so. Optimizing KCP&L's ability to conclusively demonstrate that as much as possible of the power it sells to retail customers is provided from its renewable energy sources by not selling RECs is a feasible way to meet, at least in part, goals of KCP&L's larger customers to reduce greenhouse gas emissions. Surveys conducted on behalf of KCP&L indicate that a substantial percentage of the respondents are interested in renewable energy, sustainable energy practices and mitigating impacts on the environment. This confirms, on a broader basis that a majority of all of our customer classes value KCP&L's ability to demonstrate that a key component of the power KCP&L sells to retail customers is provided from renewable energy resources.

It is also notable that customer bills would have changed very little if the revenues presumed by Staff's disallowance had been generated during the period in question,

[17] See Schedule JM-4, Principle 4.b., page 3 of 4.

approximately $0.02 per month for a customer with monthly usage of 1,000 kWh. Because KCP&L's decision not to generate revenues from the sale of RECs is based in substantial part on the desires of our customers and because the impact of that decision is immaterial to customers, Staff's recommendation that the Commission disallow approximately $350,000 on the basis that KCP&L's decision not to generate revenues through the sale of RECs is allegedly imprudent is unreasonable and should be rejected.

Q: Does that conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)	**Case No. EO-2019-0067 (Lead Case)**
In the Matter of the Second Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of Kansas City Power and Light Company	)	Case No. EO-2019-0068 (Consolidated)
In the Matter of the Application of KCP&L Greater Missouri Operations Company Containing its Semi-Annual Fuel Adjustment Clause True-Up	)	Case No. ER-2019-0199 (Consolidated)

AFFIDAVIT OF JEFF MARTIN

STATE OF MISSOURI)
) **ss**
COUNTY OF JACKSON)

Jeff Martin, being first duly sworn on his oath, states:

1. My name is Jeff Martin. I work in Topeka, Kansas, and I am employed by Westar Energy, Inc. as Vice President, Customer and Community Operations for Westar, Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company, the operating utilities of Evergy, Inc.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company consisting of eleven (11) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Jeff Martin

Subscribed and sworn before me this 23rd day of April 2019

Notary Public

My commission expires: 4/26/2021

ANTHONY R WESTENKIRCHNER
Notary Public, Notary Seal
State of Missouri
Platte County
Commission # 17279952
My Commission Expires April 26, 2021

KC cuts greenhouse gas emissions by 40 percent

https://greenabilitymagazine.com/blog/2018/10/kansas-city-surpasses-greenhouse-gas-reduction-goal/

The city of Kansas City, MO has reduced its greenhouse gas emissions by 40 percent below year 2000 levels, surpassing its goal of a 30-percent reduction by 2020, according to a new KCMO Greenhouse Gas (GHG) Inventory Update.

"The achievement of surpassing the city's goal of reducing GHG emissions from municipal operations is a major milestone in our climate work, reflecting a substantial commitment by the city's elected officials, Climate Protection Steering Committee, city staff and many community partners who have worked with us over the past decade," said Dennis Murphey, KCMO chief environmental officer. "It sets the bar even higher for future GHG reductions."

The KCMO report comes on the heels of the United Nations scientific panel report on climate change that calls for immediate and dramatic reductions in greenhouse gas emissions to slow climate change. The report released Monday by the Intergovernmental Panel for Climate Change found that if greenhouse gas emissions continue at the current rate, the atmosphere will warm by as much as 2.7 degrees Fahrenheit above preindustrial levels by 2040, resulting in devastating floods, drought, wildfires, food shortages and poverty. The report shows the increase in temperature is expected to occur much quicker than earlier reports predicted.

Kansas City officials and business leaders stepped up their efforts to reduce greenhouse gas emissions after the city council adopted a Climate Protection Plan in 2008. The goal then was to reduce city government GHG emissions by 30 percent below 2000 levels by 2020 and reduce citywide GHG emissions to 30 percent below 2000 levels by 2020 and 80 percent by 2050.

Since 2000, total citywide emissions have decreased despite a growing population, resulting in an overall decrease in emissions of 21 percent below the 2000 baseline. The reductions are primarily attributed to reductions in building energy use with progress in the transportation sector.

"The progress in citywide GHG emission reductions positions the city to meet our pledge to do our share to meet the U.S. commitments in the Paris Climate Agreement, despite the federal government's intent to withdraw from that international climate accord," Murphey said. "In view of the new Intergovernmental Panel on Climate Change report, our work is more important than ever."

The KCMO report shows results of the 2017 GHG emissions inventory and progress in the last four years toward the city's GHG goals. The emissions generated citywide in Kansas City in 2000 totaled 10.9-million metric tons of carbon dioxide equivalent (MTCO2e). To meet the 2020 citywide goal, the city will need to maintain the same reduction trend that was seen from 2013 to 2017 and reduce emissions at least 948,000 MTCO2e.

The city has taken the lead in greenhouse gas reduction by conducting a separate GHG inventory of all municipal operations. In 2000, municipal operations generated 384,000 MTCO2e, or

approximately 3 percent of citywide emissions. Municipal emissions have decreased each year and in 2017 were 230,000 MTCO2e, a decrease of 40 percent below the 2000 baseline.

Energy use in buildings has been the primary source of emissions in Kansas City, contributing about 60 percent of the total emissions generated by the community. The 2017 report shows this is a decrease over previous inventories. As building energy emissions have decreased, on-road transportation's share has increased to 34 percent, now making up more than a third of the city's total emissions. If the city's current emissions trends continue, transportation emissions will outweigh all building emissions before 2025, according to the report.

The report shows that the reduction in electricity emissions can be attributed to a 5-percent reduction in consumption and a 23-percent reduction in KCP&L's emissions since 2000 from increased use of renewables and natural gas in its fuel source mix.

Kansas City has been working to reduce energy use and GHG emissions for more than 18 years. Some of those efforts include:

- In 2013, Mayor Sly James issued an Energy Challenge for building owners to voluntarily benchmark energy use by 2014. As a result, 175 building owners committed to benchmarking, representing 25-million square feet of floor space.
- In 2014, the mayor issued an Energy Challenge for building owners to improve their ENERGY STAR scores. As a result, 38 buildings showed improved energy efficiency from 2014 to 2016 (including 25 school buildings), representing more than 5-million square feet of floor space.
- In 2015, the city adopted an ordinance establishing the Energy Empowerment Program, which requires owners of private and public buildings to benchmark their energy use with the Environmental Protection Agency's (EPA) Portfolio Manager and report that energy use to the city annually.
- Since 2013, the city has installed 1.5 megawatts (MW) of solar-energy generating capacity on the rooftops of 60 municipal buildings.
- The city converted 380 streetlights to LEDs since 2013.
- Beginning in 2016, Kansas City Power & Light Company (KCP&L) conducted a two-year Strategic Energy Management program to support energy-efficiency improvements by 20 of its largest commercial and industrial customers, including city facilities.
- The city launched a new streetcar in the loop from the River Market area to Union Station in 2015.
- Property Assessed Clean Energy (PACE) loans have been used to implement $15 million in energy-efficiency improvements to nine commercial buildings and

$8.16 million in the residential sector to complete 847 energy-efficiency and solar projects since September 2016.

- Kansas City was one of 10 cities nationwide selected to participate in the City Energy Project, a three-year initiative to promote energy efficiency in large commercial and institutional buildings from 2014 to 2016.

- An Energy Data Accelerator was a two-year initiative partnership with KCP&L to help aggregate energy use data in multi-metered buildings to prepare for energy use benchmarking.

- Bike KC is a plan to develop a transportation network, including 600 miles of on-street bicycle facilities.

ORDINANCE NO. 190233

Authorizing the City Manager to execute Renewables Direct Participation Agreements with KCP&L for the City's KCP&L and GMO account areas for the purpose of purchasing electric energy from a renewable energy resource.

WHEREAS, Kansas City has been a leader in acknowledging the effects of climate change on the City, region, State and Nation; and

WHEREAS, the City, in partnership with local energy providers, the business community and the general public, is making progress to ensure that buildings are more energy efficient, wind and solar are increasingly a greater part of the City's electricity mix, and electric vehicles are being used in significantly greater numbers; and

WHEREAS, one hundred ninety-five (195) countries, including the United States, committed to address climate change by signing the Paris Climate Agreement in December 2015; and

WHEREAS, each signatory country to the Paris Climate Agreement stated its intention to make certain contributions toward the overall goals of the Agreement; and

WHEREAS, the United States stated its intention to reduce greenhouse gas emissions by 26-28 percent below its 2005 levels by 2025; and

WHEREAS, Mayor Sly James reaffirmed the City's commitment to abide by the targets set out in the Paris Climate Agreement by joining other mayors from cities across the country in pledging to "adopt, honor, and uphold the commitments to the goals enshrined in the Paris Agreement"; and

WHEREAS, Council, in Resolution No. 170484 adopted on July 20, 2017, asserted that the City "continues to support the principles of the Paris Climate Agreement" and the City "will continue to stand with cities and other public and private sector partners throughout the world to advance action in accordance with the goals outlined in the Paris Climate Agreement"; and

WHEREAS, Kansas City was recognized as a national and international leader in sustainable urban development initiatives and has joined the UNESCO Creative City Network as a City of Music, seeking to demonstrate continued progress toward the 2030 Agenda for Sustainable Development by engaging in the implementation of Sustainable Development Goals; and

WHEREAS, Council, in Resolution No. 170586, adopted on August 17, 2017, directed the City Manager to study the feasibility of implementing certain measures necessary to make progress towards the targets of Paris Climate Agreement; and

WHEREAS, the City Manager's office on March 29, 2018, reported that it was indeed feasible to enact the measures outlined in Resolution No. 170586; and

WHEREAS, Council in Resolution 181000, adopted on March 7, 2019, directed the City Manager to, among other things, enter into negotiations to obtain all its electricity used for municipal operations from carbon-free sources; and

WHEREAS, the City receives services from KCP&L in two separate account areas, known as the KCP&L account area and the Greater Missouri Operations (GMO) account area; and

WHEREAS, City staff have reviewed KCP&L's Renewables Direct Participation Agreement for Missouri customers and identified the amount of generation capacity necessary to meet the City's need for electricity to be used in municipal operations and recommend that the City move forward in signing two participation agreements (one for each of KCP&L and GMO account areas in which City operations are located) with terms of twenty years; NOW, THEREFORE,

BE IT ORDAINED BY THE COUNCIL OF KANSAS CITY:

Section 1. That the City Manager is hereby authorized to execute Renewables Direct Participation Agreements with KCP&L for the City's KCP&L account area and for the City's GMO account area for the purpose of purchasing electric energy from a renewable energy resource. A copy of the agreement is on file in the City Manager's Office.

Approved as to form and legality:

Katherine Chandler
Assistant City Attorney

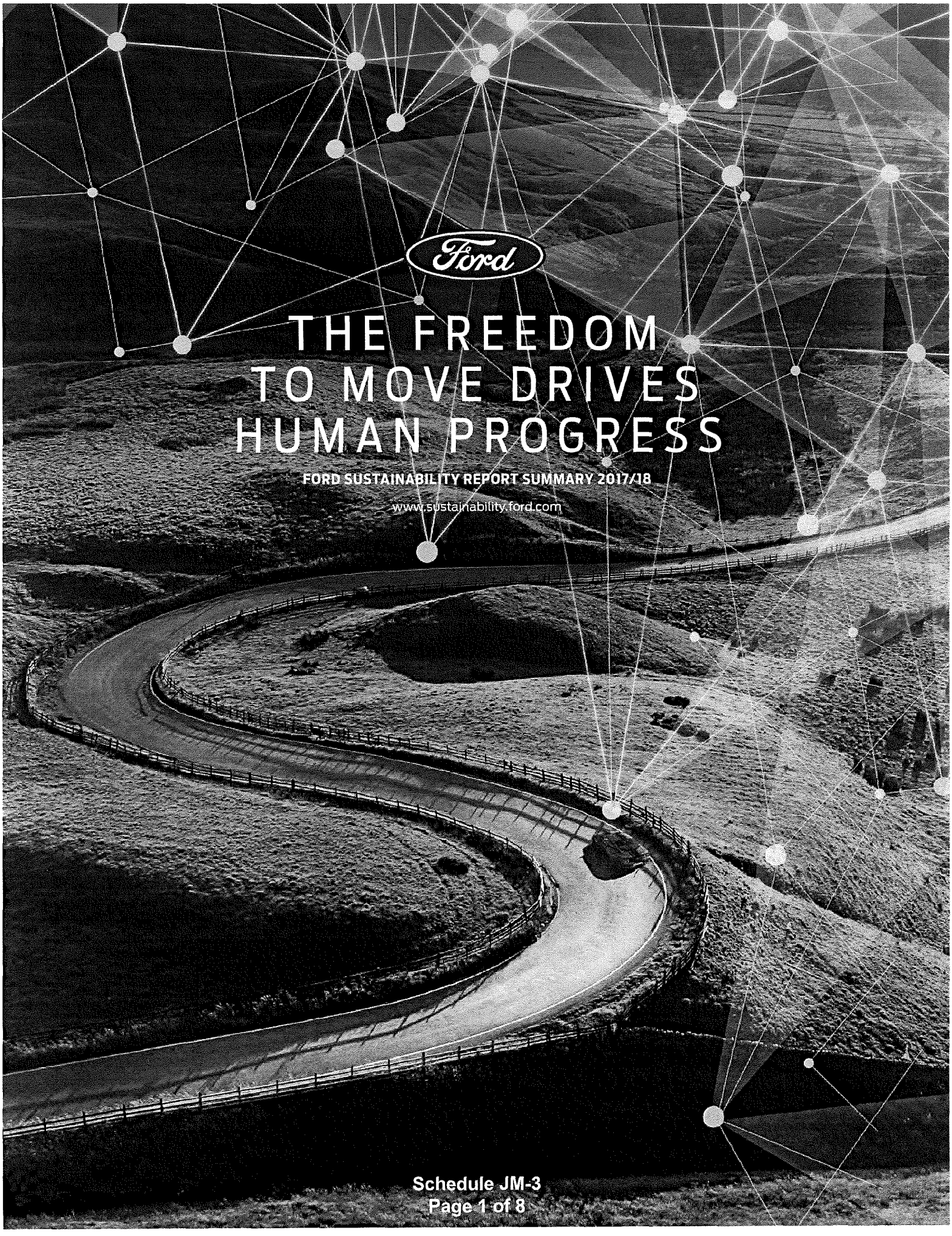
Authenticated as Passed

Sly James, Mayor

Marilyn Sanders, City Clerk

APR 11 2019

Date Passed


Ford
THE FREEDOM TO MOVE DRIVES HUMAN PROGRESS
FORD SUSTAINABILITY REPORT SUMMARY 2017/18
www.sustainability.ford.com

Sustainability at Ford

Every step we take comes from the understanding that mobility drives human progress. This puts Ford Motor Company in the forefront to deliver positive change for society, whether it's helping people to access ways to experience our world, generating economic value in communities or tackling environmental and social challenges.

INSIDE

FUTURE CITIES

2050 predictions

2.5 billion

more people in urban locations

"We have always believed that freedom of movement drives human progress, which is why we aspire to be the world's most trusted company, designing smart vehicles for a smart world. As we look to the future, we will move from reducing our impacts to contributing positively on the environment, while also making people's lives better through greater mobility, more connectivity, less congestion and reduced emissions."

William Clay Ford, Jr., Executive Chairman, Ford Motor Company

Jim Hackett, President and Chief Executive Officer, Ford Motor Company

Ford has a vision of streets designed for living. With this vision, we're reimagining how communities function, to build a true City of Tomorrow.

REIMAGINING URBAN MOBILITY

Faced with rapid urbanization, and the pollution and congestion that comes with it, it's clear that we need to update cities to move people and goods more efficiently. By developing smart vehicles for a smart world, we have the opportunity to take major leaps toward building a true City of Tomorrow and reimagining how our streets and cities function.

With the power of artificial intelligence and the rise of autonomous and connected vehicles, we have technology capable of completely redesigning the surface transportation system for the first time in a century.

Ford is taking a human-centered, systems-level design approach to mobility. We can't just implement this new technology without first fully understanding how it is going to make people's lives better. We need to get this new design right – and have begun by collaborating with cities, civic organizations, urban planners, technologists and designers around the world.

CREATING TOMORROW'S CITIES

We've just opened a new office in London, Here East, that will create new mobility technologies focused on the needs of European urban centers and help us build the city of the future.

Read the full story on Building the City of Tomorrow

CREATING A SMARTER SYSTEM WITH THE TRANSPORTATION MOBILITY CLOUD

The way to tackle city mobility challenges is to think of the many elements as parts of a singular transportation ecosystem comprising infrastructure and equipment, personal vehicles, mass transit and ride-sharing services, and digital interfaces and processes. Individual solutions – electric vehicles, autonomous vehicles, ride-sharing services, etc. – need to interact with all the other components in this "ecosystem," speak a common language and work together.

To address some of the issues we'll face, collaboration will be crucial – partnerships such as the one with Autonomic to create the open Transportation Mobility Cloud. This will provide a platform able to facilitate the flow of information and perform key processes to support the entire system, from payment methods and identity verification to parking assist and real-time traffic intelligence.

With this platform, transportation modes in cities can work together. For example, instead of double parking on an already crowded street, a delivery van could reserve and pay for curbside parking, and the city would be able to tell the next vehicle in line when that space will be available. With the Transportation Mobility Cloud, residents and businesses could use the information to make smarter choices for their schedules, for external factors such as weather and for their wallets.

This is where technology like cellular vehicle-to-everything (C-V2X) can play an important role. This capability, which we're working on with another of our partners, Qualcomm, enables various technologies and applications in a city to speak to each other. We believe C-V2X will enable our vehicles to share fast, safe and secure communications with the cities of the future.

The potential of our open mobility services platform to participate in a robust communications system will come into its own when self-driving vehicles become more commonplace, changing the way people and goods get around within an efficient, connected transportation system.

MIAMI: THE NEW PROVING GROUND FOR SELF-DRIVING CARS

We're investing heavily in breakthrough autonomous vehicle technology, the key to Ford's urban mobility solutions of the future. In Miami, we are involved in pilots to understand human factors, such as how consumers interact with driverless deliveries.

Read the full story on Smart Vehicles for a Smart World

ELECTRIFYING *the* FUTURE

We believe that climate change is real and that we share the responsibility for reducing greenhouse gas emissions in our products. We are committed to making safer, more efficient, lower-impact vehicles and technologies accessible at scale.

MORE CHOICE, LOWER CARBON

Our plans for the future include researching and developing alternative powertrains and fuel options across all our vehicles, delivering on our promise to give customers the power of choice.

Electrified vehicles are a core component of that strategy, with enormous potential for smart mobility. We already offer our customers wide choices of electrified vehicles in our model lineup, and are significantly increasing our planned investments. For example, with sales of electrified vehicles and hybrids in China growing by 53 percent in 2016, we will launch 15 electrified vehicle models in the world's largest car market by 2025.

THINKING BIG ABOUT ELECTRIFIED VEHICLES

Our extended electrified vehicle strategy aligns with increasing global demand. China, India, France and the U.K. have already announced plans to phase out vehicles powered by combustion engines and fossil fuels between 2030 and 2040. We remain focused on delivering affordable electric vehicles at scale, building on nearly two decades of experience in electrification. We're doing this by taking our mainstream vehicles – our most popular and iconic vehicles – and electrifying them.

$11 billion investment in electrification

40 hybrid and fully electric vehicles by 2022

INNOVATION, WITH A SIDE OF HISTORY

In 2017, Team Edison – our new electric vehicle team – and our self-driving vehicle team moved to a refurbished factory in the center of Detroit. There, they will learn and guide how the next generation of urban vehicles works.

Read the full story on Scaling Up Electrification

GROWING NEW VEHICLES ON THE FARM

Today, around 300 of our vehicle parts are made with sustainable materials that use less energy, consume less waste and move away from fossil fuels. And we're always exploring new possibilities with remarkable materials like bamboo.

Read the full story on Our Climate Commitment

BETTER FUEL ECONOMY, LOWER EMISSIONS

A JOURNEY TO A LOWER-CARBON ECONOMY

Improving fuel economy goes hand in hand with our work on electrification. In line with our climate strategy and glide paths, we're committed to making more efficient, lower-impact vehicles and technologies accessible at scale, and support increasing clean car standards in the United States through 2025.

Guided by our Sustainable Technologies and Alternative Fuels Plan, we use a variety of approaches to improve the fuel economy of our gasoline- and diesel-powered vehicles. These include the use of aluminum and other lighter materials, more aerodynamic designs and low-resistance tires.

IMPROVING AIR QUALITY THROUGH EUROPEAN SCRAPPAGE SCHEME

In August 2017, we launched a car and van scrappage scheme to reduce vehicle emissions and improve air quality in several European markets, including the U.K. and Germany. It enables owners to trade in their old vehicles for new, affordable Ford cars and commercial vehicles with EcoBoost petrol and EcoBlue diesel models; these meet the Euro 6 standard, the toughest vehicle emissions standard yet.

ALTERNATIVE TRANSPORT OPTIONS

As part of our efforts to develop lower-carbon transport solutions, Ford Germany has joined with Deutsche Bahn Connect to make 3,200 FordPass bicycles available to the general public, and developed StreetScooter WORK XL e-vans with Deutsche Post DHL Group. Almost 150 were used for the group's urban parcel delivery service in 2017 and we plan to build 2,500 more in 2018.

Vehicles replaced through European scrappage scheme

+10,500

HIGH MARKS FOR SAFETY

SAFER CARS, SAFER DRIVERS

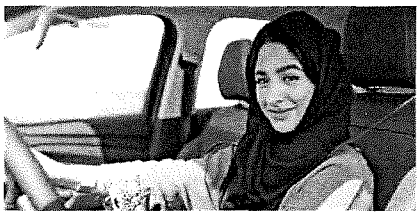
We are committed to designing and manufacturing vehicles that achieve high levels of safety over a wide range of real-world conditions, and receive high marks in the industry's key public and private crash-testing programs.

Driver assist technologies help customers drive more safely, alert them to potential collisions and make routine tasks easier. Available on specific vehicles in certain markets, they include technology for speed assistance, braking and collision avoidance, lane management, parking, vision and visibility. These technologies are also the building blocks for autonomous vehicles operating safely in a fully connected transport ecosystem. Driver safety goes way beyond the construction and safety features of a vehicle. We also encourage safer behavior through driver education, including our global flagship program, Ford Driving Skills for Life. As the initiative expands, we adapt it to suit different regions with a range of modules targeting a variety of challenges.

For instance, in 2017, we collaborated with Google to produce Ford Reality Check, a virtual reality (VR) app highlighting the danger of distractions to young drivers. The experience uses Google Daydream VR to cast the participant as a distracted driver picking up friends on the way to a party. Instant messages, phone calls and chatty passengers all compete for attention, before a final, fatal distraction. In initial tests, 90 percent of app users said they would change their driving behavior.

MOBILITY AND DRIVER SAFETY IN SAUDI ARABIA

In 2018, we began a ground-breaking program in Saudi Arabia: driving education for women. In a global first for us, we tailored our Ford Driving Skills for Life program specifically for female drivers.



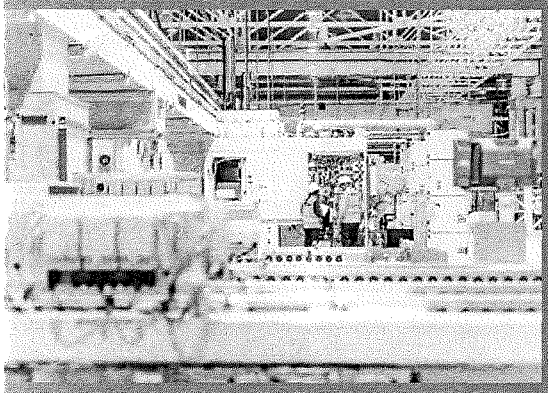
Read the full story on A Force for Good

Ford Motor Company models achieving five-star rating, New Car Assessment Program (NCAP)

14	11	5
nameplates	nameplates	nameplates
U.S. NCAP	EURO NCAP	CHINA NCAP

CREATING *eco-efficient* OPERATIONS

As well as directly managing the impacts of Ford-owned and operated facilities around the globe, we also have a responsibility to help our suppliers reduce their environmental footprint while ensuring social standards.



85 Ford sites have now achieved zero waste to landfill status

+9 sites in 2017

REDUCING FACILITY ENERGY USE AND GREENHOUSE GAS EMISSIONS

In 2010, we set an ambitious goal to reduce operational greenhouse gas (GHG) emissions per vehicle produced by 30 percent by 2025, which we reached eight years early. In 2017, we also reduced facility energy consumption (on a per-vehicle basis) by 6.8 percent compared to 2015. We continue to focus on driving efficiencies globally, and have also applied the glide path targets developed for our future vehicle lineup to our manufacturing operations. These are based on climate science and the need to limit the rise in global temperature to under 2 degrees Celsius.

EFFECTIVE WATER STEWARDSHIP

Our 2020 target, to reduce water use per vehicle produced by 30 percent from 2015 to 2020, represents a significant challenge, but it's a vital step forward if we are to achieve our long-term aim: to manufacture vehicles without withdrawing any drinkable water. Since 2000, we've reduced our operational water use by 62.5 percent.

We're also proud to be a signatory to the UN CEO Water Mandate and to be named in the CDP's Water A List.

AIMING FOR ZERO WASTE TO LANDFILL

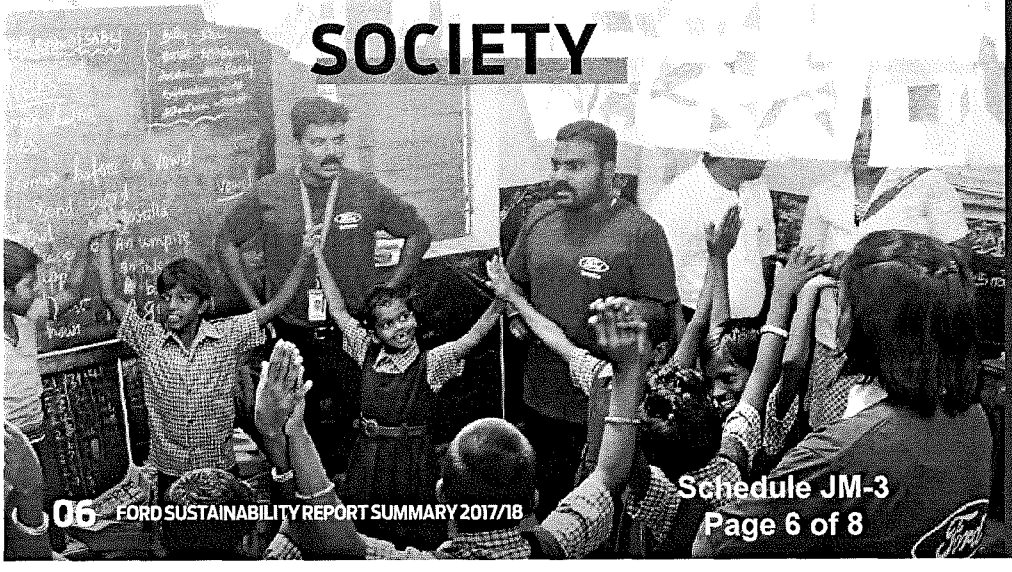
Our aim is to minimize manufacturing and production waste, helping to reduce the overall environmental impact of our operations. Our five-year global waste reduction plan outlines how we will seek to avoid sending waste to landfill wherever practicable, through the efficient use of resources and by developing closed-loop recycling processes.

BUILDING SUPPLIER CAPABILITY THROUGH PACE

Our supply chain sustainability initiative, the Partnership for A Cleaner Environment (PACE), was developed to reduce the overall environmental impact of both Ford and our supply chain partners.

PACE enables us to share the best practice examples we've implemented with 50 key suppliers, so that they can be replicated and we can minimize our overall environmental impact. We also encourage our Tier 1 suppliers to cascade the information down to their own suppliers to extend the reach of the program.

CONTRIBUTING *to wider* SOCIETY



By working with and contributing to the communities where we live and work, we can help improve quality of life for all. We aim to create a positive impact in areas including hunger relief, poverty alleviation, environmental initiatives and support for underrepresented populations. We also support education to strengthen our talent pipeline.

RESPECTFUL, INCLUSIVE WORKPLACES

We are a human-centered company that wants to be recognized as an employer of choice, wherever we operate. As we transform our business, we need to attract, retain and nurture a diverse range of talented and motivated people, enabling them to develop the products and services

DEVELOPING *sustainable* MATERIALS

Our research scientists in the United States, Germany, China and Brazil have been exploring ways to replace petroleum-based plastics with more sustainable materials since 2000. We continue to be a leader in the research, development and integration of more plant-based, renewable and recycled content in our vehicles. As well as recycling materials such as aluminum from our auto parts back into the same use, known as "closed-loop recycling," we are exploring other waste streams, including shredded banknotes and plastic bottles, as sources of recycled materials.

SOY WAS JUST THE START

It's been over a decade since Ford first used soybean-based foam and since 2011, it's been a key material in the seat cushions, seat backs and headrests of every vehicle we build in North America – that's more than 18.5 million vehicles and half a trillion soybeans. Our expanded renewable materials program now features wheat, rice, castor, kenaf (hibiscus), jute and coconut, and we are exploring other bio-based resources such as tomato skin, bamboo, agave fiber, dandelions and even algae.

In addition, we've been researching cellulose from trees in its nano form. We found that when added to plastics, nano-crystalline cellulose produces excellent sound damping and in foams, it improves the mechanical properties of the material significantly. We look forward to using these findings in our products soon.

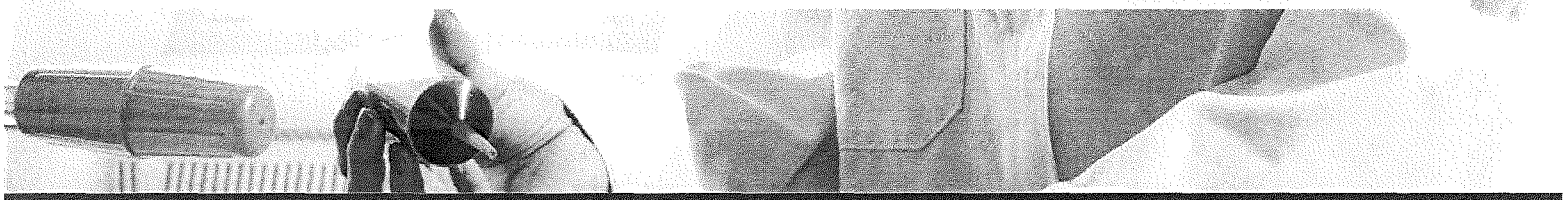
More than 228 million pounds

CO_2 emissions avoided by using soy

Equal to carbon capture by

4 million trees

in one year



that will help improve lives. Core to our employee promise is the need to create a safe, collaborative and respectful work environment for all 202,000 Ford people. We work hard to fulfill this responsibility and where issues and concerns arise, we work tirelessly to put them right.

PROTECTING HUMAN RIGHTS

It is an absolute priority to ensure that everything we make – or that others make for us – is consistent with local law and our own commitment to protecting human rights. We have adopted the Responsible Business Alliance audit methodology, conducted a formal saliency assessment to identify our key human rights issues, and are further expanding our reporting within recognized global frameworks.

COMMUNITY INVOLVEMENT

Volunteerism is an integral part of our business. We encourage our employees to participate in programs that strengthen the communities in which we operate through the Ford Volunteer Corps. This network of current and retired Ford employees across six continents is dedicated to helping feed the hungry, deliver clean water, build homes, renovate schools and mentor young people.

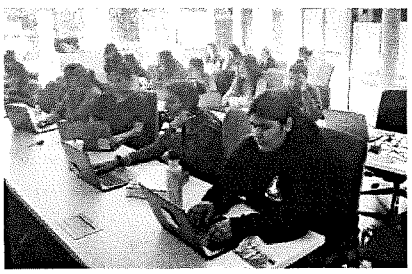
IN 2017

more than **237,000** hours of community service

volunteer time donated equivalent to **$5.72 million** financial investment

SUPPORTING WOMEN IN TECH

We're working to correct the significant underrepresentation of women in tech by teaming up with Girls Who Code, a nonprofit that empowers young women with skills in robotics, web design, mobile development and more.



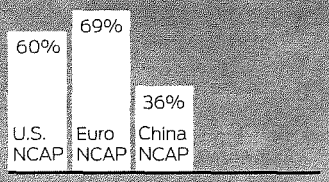
Read the full story on A Force for Good

2017 SUSTAINABILITY PERFORMANCE METRICS

VEHICLE SAFETY

Ford and Lincoln Nameplates With 5-Star Overall Rating in U.S., Euro or China NCAP[1] (as of June 2018)

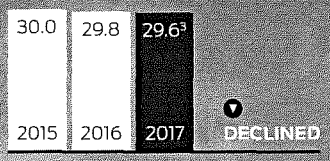
Percent of Available Ford and Lincoln Nameplates With 5-Star Overall Rating[2]



FUEL ECONOMY

U.S. Corporate Average Fuel Economy, Combined Car and Truck Fleet

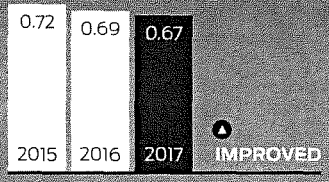
mpg



CO_2 EMISSIONS

Worldwide Facility CO_2 Emissions per Vehicle Produced

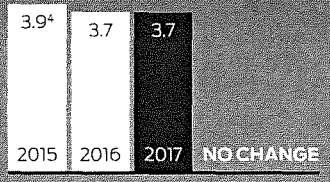
Metric tons



WATER USE

Global Water Use per Vehicle Produced

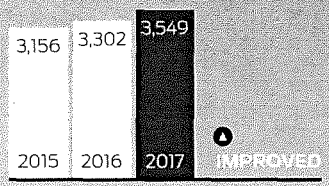
Cubic meters



SUPPLY CHAIN

Total Supplier Sites Trained/Retrained in Sustainability Management

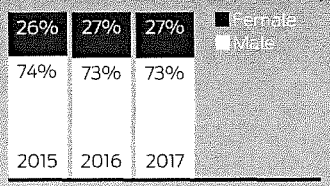
Cumulative, since 2005



DIVERSITY

Global Salaried Employees by Gender

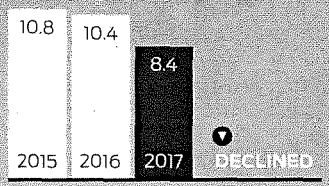
Percent



FINANCIALS[5]

Adjusted Pre-Tax Profit

$ billion



1 NCAPs around the globe do not have the same test protocols, evaluation criteria and star rating methodologies. For example, a particular star rating in Euro NCAP does not necessarily mean that the vehicle will have the same rating if tested in a different NCAP. For the latest information on star ratings, go to an NCAP organization's website.

2 NCAP organizations do not necessarily rate all of a manufacturer's nameplates, for example:
- As of June 2018, U.S. NCAP has only rated 12 of 17 Ford and five of six Lincoln nameplates for the 2018 model year.
- As of June 2018, U.S. NCAP has not yet rated the all-new 2018 model year Ford EcoSport nameplate.
- The Euro NCAP vehicle selection protocol is such that the largest versions of the Ford Transit would never be rated by that organization; conversely, U.S. NCAP may choose to rate those variants.
- China NCAP has only rated a limited number of Ford and Lincoln nameplates; for example, the Ford Explorer, Mustang and Mondeo, and Lincoln MKZ, MKX and Continental have not been rated by C-NCAP.

3 Includes FFV credits. Does not include A/C or Off-Cycle credits.
The decline in combined car and truck fuel economy of 1 percent YOY is primarily due to customers' shifting to larger cars and more trucks and reduced CAFE FFV credits. Despite the decrease in combined car and truck CAFE, on an individual basis, our vehicles continue to make fuel economy improvements.
See http://corporate.ford.com/microsites/sustainability-report-2017-18/customers-products-reducing-emissions/fuel-economy.html.
Combined fleet fuel economy has improved by 9 percent compared to 2009.

4 2015 data has been restated due to water meter repairs at a number of facilities.

5 See pages 25 and 79 of Ford's 2017 Form 10-K for definition and reconciliation to GAAP.

Contact
Preparing this summary offers a valuable opportunity for us to assess and improve upon our progress and performance. To continue to do so, we need your feedback.

CDP A LIST 2017 WATER

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CORPORATE RENEWABLE ENERGY BUYERS' PRINCIPLES: INCREASING ACCESS TO RENEWABLE ENERGY

Sixty percent of the largest US businesses have set public climate and energy goals to increase their use of renewable energy.[1] Companies are setting these goals because reducing energy use and using renewable energy have become core elements of business and sustainability strategies.

Businesses are actively and successfully adding renewable energy to their own facilities and increasingly entering into contracts to buy or invest in offsite renewable energy. Even though cost-effective project opportunities currently exist, with billions of kilowatt hours still needed to meet their renewable energy goals, businesses face a variety of challenges accessing cost-effective projects on favorable terms.

The following principles frame the challenges we are facing and our common needs as large renewable energy buyers. We developed these principles to help facilitate progress on these challenges and to add our perspective to discussions underway across the country on the future of our energy and electricity system.

We hope these principles will open up new opportunities, choices and collaborations that will help businesses meet their public goals to increase the use of renewable energy.[2] We encourage others to join us in supporting these principles to expand and streamline the opportunities for renewable energy procurement.

IN ORDER TO MEET CUSTOMER NEEDS AND DRIVE IMPACT WE, THE ABOVE-SIGNED COMPANIES, ARE SEEKING, IN NO PARTICULAR ORDER, THE FOLLOWING FROM THE MARKETPLACE:

1 Greater choice in our options to procure renewable energy

It is important to have choice when selecting energy suppliers and products to meet our business and public goals.

2 Cost competitiveness between traditional and renewable energy rates

We know renewable energy can already achieve cost parity, or better, compared with traditional energy rates. When purchasing renewable energy directly, we would like to be able to buy renewable energy that accurately reflects the comprehensive costs and benefits to the system. Many of us are willing to explore alternative contract arrangements (e.g., entering into long term supply arrangements with utilities and other suppliers to provide revenue certainty) that can bring down the cost of capital.

3 Access to longer-term, fixed-price renewable energy

A significant part of the value to us from renewable energy is the ability to lock in energy price certainty and avoid fuel price volatility. Many companies would like to have options for entering into contracts over various time periods.

FOOTNOTES

1 WWF, Ceres and Calvert Investments (2012) Power Forward: Why the World's Largest Companies are Investing in Renewable Energy.

2 These are general principles and they are not intended to limit the scope of individual company efforts to responsibly procure renewable energy.

4 Access to projects that are new or help drive new projects in order to reduce energy emissions beyond business as usual

We would like our efforts to result in new renewable power generation. Pursuant to our desire to promote new projects, ensure our purchases add new capacity to the system, and that we buy the most cost-competitive renewable energy products, we seek the following:

a. Access to bundled renewable energy products—energy and Renewable Energy Credits (RECs)

We are increasingly interested in access to bundled energy and REC products. Unbundled RECs do not deliver the same value and impact as directly procured renewable energy from a specific project or facility.

b. Ability to prevent double counting within the energy consumer community

In order to claim the benefits of our renewable energy purchases to satisfy our public goals and reduce our carbon footprint, current US rules require that we retain ownership of the RECs or that they are retired on our behalf.

Some companies find this single-instrument system creates competition between energy generators and energy users that can slow the growth of voluntary corporate renewable purchases. We welcome discussion to explore market mechanisms that enable greater voluntary growth of renewable energy while maintaining accounting integrity.

What is most critical to us is that we have the ability to add more renewable energy to the system and claim the consumption of the relevant renewable energy and GHG emission benefits while preventing another energy user from claiming consumption of the same renewable energy.

c. Renewable energy delivery from sources that are within reasonable proximity to our facilities

Where possible, we would like to procure renewable energy from projects near our operations and/or on the regional energy grids that supply our facilities so our efforts benefit local economies and communities as well as enhance the resilience and security of the local grid.

5 Increased access to third-party financing vehicles as well as standardized and simplified processes, contracts and financing for renewable energy projects

To access renewable energy at the competitive prices and scale we need to meet our goals, many companies are financing and/or procuring renewable energy through third-party providers using power purchase agreements (PPAs) and/or lease arrangements. Increasing access to these types of effective and affordable financing tools is critical.

Initially, for some companies, these processes can be complex and costly since they are outside of their core business functions. Simplifying and standardizing policies, permitting, incentives and other processes for direct procurement are high priorities for many companies.

6 Opportunities to work with utilities and regulators to expand our choices for buying renewable energy

Procuring renewable energy in partnership with our local utilities may be a more efficient and cost-effective option. We welcome the opportunity to work with local utilities to design and develop innovative programs and products that meet our needs as well as those of our energy suppliers. In such collaborations, we would seek renewable energy products and programs that address the above principles and that

a. fairly share the costs and benefits of renewable energy procurement

We seek to purchase renewable energy that reflects the net costs and benefits to the system, including the actual cost of procurement and benefits, such as, but not limited to, avoided energy and capacity benefits, without impacting other rate payers.

b. apply to new and existing load

To meet our public goals, we need renewable energy for both new and existing operations.

CORPORATE RENEWABLE ENERGY BUYERS' PRINCIPLES: INCREASING ACCESS TO RENEWABLE ENERGY

These principles have emerged through discussions between the participating companies convened by WWF and WRI. The companies identified common challenges to meeting their renewable energy goals and proposed establishing these principles. They worked together, facilitated by their NGO partners, with the goal of clearly communicating to the market the renewable energy products they would like to buy.

For more information or if your organization is interested in joining the principles, please visit **www.buyersprinciples.org** or contact:
Bryn Baker – bryn.baker@wwfus.org
Priya Barua – pbarua@wri.org

WWF

WWF is an organization dedicated to stopping the degradation of the planet's natural environment and building future in which humans live in harmony with nature. WWF achieves this mission through innovative partnerships that combine on-the-ground conservation, high-level policy and advocacy and work to make business and industry more sustainable. This work includes engagements with hundreds of companies across a range of sustainability issues, including our Climate Savers program and facilitation of the Corporate Renewable Energy Buyers' Group, which produced these principles.

WORLD RESOURCES INSTITUTE

The **World Resources Institute (WRI)** is a global research organization that spans more than 50 countries, with offices in the United States, China, India, Brazil, Europe, and Indonesia. Our 450 experts work closely with leaders to turn **big ideas into action** to sustain a healthy environment—the foundation of economic opportunity and human well-being. We focus on six urgent global challenges: food, forests, water, climate, energy and cities & transport.

Interest in Renewables (Missouri)

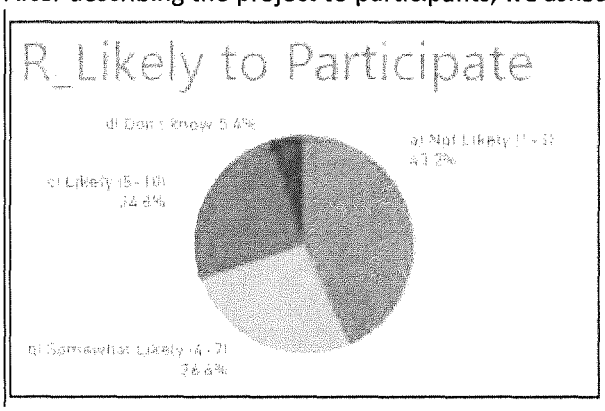
We have conducted multiple surveys among our Customer Advisory Panel, but none have specifically addressed interest in renewable energy. Two recent surveys broach the topic from different angles, and their results are included below.

Project 18-3001 New Solar Program Interest

This survey was conducted among 1,178 KCP&L members of the Customer Advisory Panel in July 2018. The project was described like this:

> *This program gives KCP&L customers the opportunity to support clean energy through solar power, without the need to install solar panels on their homes or apartment. After enrolling in the program, a portion of a customer's energy bill would reflect an additional rate for their solar panel subscription to a local solar farm, providing clean energy to the grid in the KCP&L service area.*

After describing the project to participants, we asked respondents how likely they were to participate in this solar program if offered by KCP&L, at a cost of $5-$10 per month. (Scale: 1 = not at all likely; 10 = very likely).



This chart shows results for the Missouri panel members only. It shows that one-quarter of that group (25%) pegged their likelihood of participating as "likely" (8-10). The largest subset of Missouri customers (43%) said they were unlikely to participate (1-3).

We also asked panel members their thoughts on solar power, and they were given six options from which to choose their answer. Again, these results are filtered for Missouri customers only.

They show that 34% of Missouri panel members have considered solar but did not install it due to cost. Another 24% cannot add solar at their homes but would consider a shared solar program. A hefty 16% would like to add solar panels to their homes, and three percent already have them.

Q15: Which of the following statements BEST describes your thoughts on **solar power**?

33.8%	I have looked at solar, but I don't want to invest in the upfront costs
24.4%	I am not able to add solar to my home, but I would be interested in a shared solar option
17.4%	I want to do more to support the environment but haven't considered solar
15.6%	I have looked at solar power options and would like to purchase/lease solar panels for my home
5.4%	I have no interest in solar power
3.4%	I currently own/lease solar panels for my home

Project 18-3002 Profiling Questionnaire

This questionnaire is answered by all customers who express an in joining the Customer Advisory Panel. It is comprised largely of demographic and attitudinal questions. Customers' answers are stored and can be applied to any study so that we can assess answers by respondent age, for instance, without having to ask the question in each study. This study is on-going, so the data here are from both new and longer-term panel members. The results shown here are for Missouri panel members only.

One of the questions asks panel members to indicate the number along a seven-point anchored scale that best describes their concern for and steps to protect the environment.

Q7: Select the Number on the Scale that Best Represents the Degree to Which One of the Statements Best Describes You

1 = I have very little concern about the environment and do not take extra steps to protect the environment	2%
2	1%
3	3%
4	13%
5	26%
6	23%
7 = I am very concerned about the environment and do everything possible to protect the environment	32%

It shows that 32% of panel members said they are very concerned about the environment, compared to 2% who say they have very little concern.

IF MO, ASK Q31

31. If you knew that nearly 50% of KCP&L's electricity is produced from non-carbon sources, is ranked among the top 5 for largest wind fleets, and has the largest energy efficiency portfolio in Missouri. Does this information give you a more favorable or less favorable impression of KCP&L?

IF MORE/LESS FAVORABLE, ASK:
And you would say it would give you a MUCH (more/less) favorable impression of KCP&L?

	TOTAL MORE FAVORABLE	**78%**
	TOTAL LESS FAVORABLE	**8%**
1.	Much more favorable	46%
2.	Somewhat more favorable	32%
3.	DK/Refused DNR	14%
4.	Much less favorable	3%
5.	Somewhat less favorable	5%

Source: August 2018 Customer Tracker

IF Q64:2, ASK Q65-Q66

65. What is the likelihood that you would install solar if the payback was within five years? Would you say you would be ROTATE very likely, somewhat likely, somewhat unlikely, or very unlikely END ROTATE to install solar?

		KCPL&L	Westar
	TOTAL LIKELY	**34%**	**40%**
	TOTAL UNLIKELY	**59%**	**55%**
1.	Very Likely	13%	17%
2.	Somewhat Likely	20%	24%
3.	Somewhat Unlikely	14%	16%
4.	Very Unlikely	46%	40%
5.	DK/Refused DNR	7%	4%

Source: August 2018 Customer Tracker

Now thinking about KCP & L pursuing additional renewable energy...

26. KCP&L is committed to providing clean, affordable energy that's why they have added renewable energy sources like wind, solar, biogas and hydro power to their generation. They were the first utility in the country to own and operate a commercial-scale wind facility in the state of Kansas with our 100.5 megawatts Spearville Wind Generation Facility, which is now 148.5 megawatts. Additionally, we currently have two wind projects underway—Rock Creek and Osborn—which we expect to contribute an additional 500 MW, bringing our total renewable energy to a projected nineteen percent of our energy mix.. Has this information given you a [ROTATE] more favorable or less favorable [END ROTATION] impression of KCP&L?

[IF MORE FAVORABLE/ LESS FAVORABLE, ASK:]
And, would you say you that this information has given you a MUCH (more/less) favorable impression or a SOMEWHAT (more/less) favorable impression of KCP&L ?

		Jan '18	Mar '18
	TOTAL MORE FAVORABLE	**83%**	**76%**
	TOTAL LESS FAVORABLE	**7%**	**11%**
1.	Much more favorable	51%	43%
2.	Somewhat more favorable	32%	33%
3.	DK/Refused [DNR]	11%	13%
4.	Somewhat less favorable	3%	6%
5.	Much less favorable	3%	5%

Source: March 2018 Customer Tracker

	KCP&L - MO
SOLAR1A Have solar power at home	
Yes, solar panels that generates electricity and connected to the power grid	3.23%
Yes, solar panels for hot water	0.37%
No, do not have any solar power	96.40%
Formatted Subset Total	100%
Unweighted Sample Total Count	278
SOLAR1B Own or lease solar panels	
Own	100%
Formatted Subset Total	100%
Unweighted Sample Total Count	9
SOLAR33 Who did you buy/lease solar panels from	
Utility	66.63%
First Solar	11.13%
Other	22.24%
Formatted Subset Total	100%
Unweighted Sample Total Count	9
SOLAR3 Length of time using solar power (months)	
7 to 12 months	22.30%
13 months to 2 years	33.40%
More than 2 years to 3 years	22.20%
Don't know	22.10%
Formatted Subset Total	100%
Unweighted Sample Total Count	9

SOLAR17 Power quality & reliability since installing solar panels	
Better	11.29%
About the same	66.60%
Worse	22.10%
Formatted Subset Total	100%
Unweighted Sample Total Count	9
SOLAR19 Pay extra fee to utility related to solar power	
Yes	55.66%
No	33.27%
Don't Know	11.07%
Formatted Subset Total	100%
Unweighted Sample Total Count	9
SOLAR20A Have net energy metering	
Yes	66.83%
No	33.17%
Formatted Subset Total	100%
Unweighted Sample Total Count	9
SOLAR21 Considered using solar power	
Yes	45.69%
No	54.31%
Formatted Subset Total	100%
Unweighted Sample Total Count	269
SOLAR34 Why haven't considered using solar power	
Affordability, too expensive	49.98%
Unable to have solar panels (e.g., HOA, condo, apartment, etc.)	8.20%
Low electricity need	1.36%
Solar panels don't work on our house (e.g., shade, type of roof, age of home, etc.)	10.98%
Planning to move	4.10%
Not attractive, poor aesthetics	13.72%
Not available in my area	2.05%
Not interested	26.08%
Other	3.42%
Don't know	12.98%
Formatted Subset Total	100%
Unweighted Sample Total Count	146
SOLAR23 Familiarity with solar power options	
Very familiar	1.86%
Somewhat familiar	21.19%
Not very familiar	47.90%
Not at all familiar	29.05%
Formatted Subset Total	100%
Unweighted Sample Total Count	269
SOLAR27 Main reason for planning to use solar power	
Protection against rising energy costs	56.19%
Environmental impact	48.05%

Self-sufficiency	43.17%
Improved power quality and reliability	17.10%
Increased home value	12.23%
Location is remote	1.65%
Lower bill	70.72%
Reduce dependency on foreign energy supply	18.75%
Other	0.81%
Don't know	1.62%
Formatted Subset Total	100%
Unweighted Sample Total Count	123

SOLAR30 Number of solar communications (past 3 months)

1	53.42%
2	14.53%
3	12.60%
4 to 5	7.76%
6 to 9	4.87%
10 or more	6.82%
Formatted Subset Total	100%
Unweighted Sample Total Count	103

SOLAR31 Solar communications gave positive/negative impression of utility

Very positive	7.75%
Positive	18.43%
Neutral	44.68%
Negative	11.61%
Very negative	0.98%
Don't know	16.54%
Formatted Subset Total	100%
Unweighted Sample Total Count	103

Source: JD Power Residential 2nd Half 2018

NORTH AMERICAN Renewables Registry

NORTH AMERICAN RENEWABLES REGISTRY –SERVICE FEES STARTING JANUARY 1, 2018

FEE SCHEDULE:

Type	Size	Registration ($)	Subscription ($)
Account: **Project Account**		250	0
Account: **General Account**		750	2000
Account: **Retail Purchaser Account**		0	1000
Account: **Qualified Reporting Entity**		0	0
Asset: **Micro Generator**	<40 kW	0	50
Asset: **Small Generator**	40 kWs to <1MW	250	500
Asset: **Medium Generator**	1 MW to <10MW	500	1000
Asset: **Large Generator**	>10MW	1000	2000
Asset: **Energy Efficiency project**	Any	500	1000

Volumetric Fees:
Issuance Fee: $0.03 per Certificate issued
Transfer Fee: $0.01 per Certificate transferred
Retirement Fee: $0.03 per Certificate retired
Export Fee: $0.03 per Certificate Exported
Import Fee: $0.01 per Certificate Imported

FEE TYPES:
Registration Fee. Subscriber shall pay a one-time Registration Fee at the time that it registers a Generating Asset, Energy Efficiency Asset and/or opens an Account in the Registry, which Registration Fee will be based upon the size of Generating Asset and/or the type of Account(s) opened by Subscriber. If Subscriber is registering more than one Asset, Subscriber will pay a separate Registration Fee for each Asset registered.

Subscription Fee. Subscriber shall pay an annual Subscription Fee, payable at the time that it registers in the Registry and in January of each subsequent calendar year, which Subscription Fee will be based upon the size of any Generating Asset registered and the type of Account maintained by Subscriber. If Subscriber registers more than one Asset, Subscriber will pay a separate Subscription Fee for each Asset registered. Subscription Fees will not be pro-rated, and the entire annual Subscription Fee will be due, regardless of when Subscriber first registers in the Registry.

Volumetric Fees. Subscriber shall pay a monthly Volumetric Fee, which will be determined as follows:
(1) Issuance Fee: Account Holder shall pay an Issuance Fee for each Certificate issued in the Registry for a project registered by Account Holder.
(2) Transfer Fee: Account Holder shall pay a Transfer Fee for each Certificate transferred to one of Account Holder's accounts. This includes Certificate transfers from other REC registries.
(3) Retirement Fee: Account Holder shall pay a Retirement Fee for each Certificate retired in one of Account Holder's accounts in the Registry.

NORTH AMERICAN Renewables Registry

(4) Export Fee: Account Holder shall pay an Export Fee for each Certificate exported to another REC registry.