



Speaking Senior Leadership's Language to Advance Your Energy Program

Andre de Fontaine, U.S. Department of Energy
May 10, 2016

Today's Panelists

- Dan Cassidy, Senior Manager of Energy & Conservation, Johnson & Johnson
- Erick Shambarger, Director of Environmental Sustainability, City of Milwaukee

Johnson & Johnson





**Speaking Senior Leadership's Language to
Advance Your Energy Program**

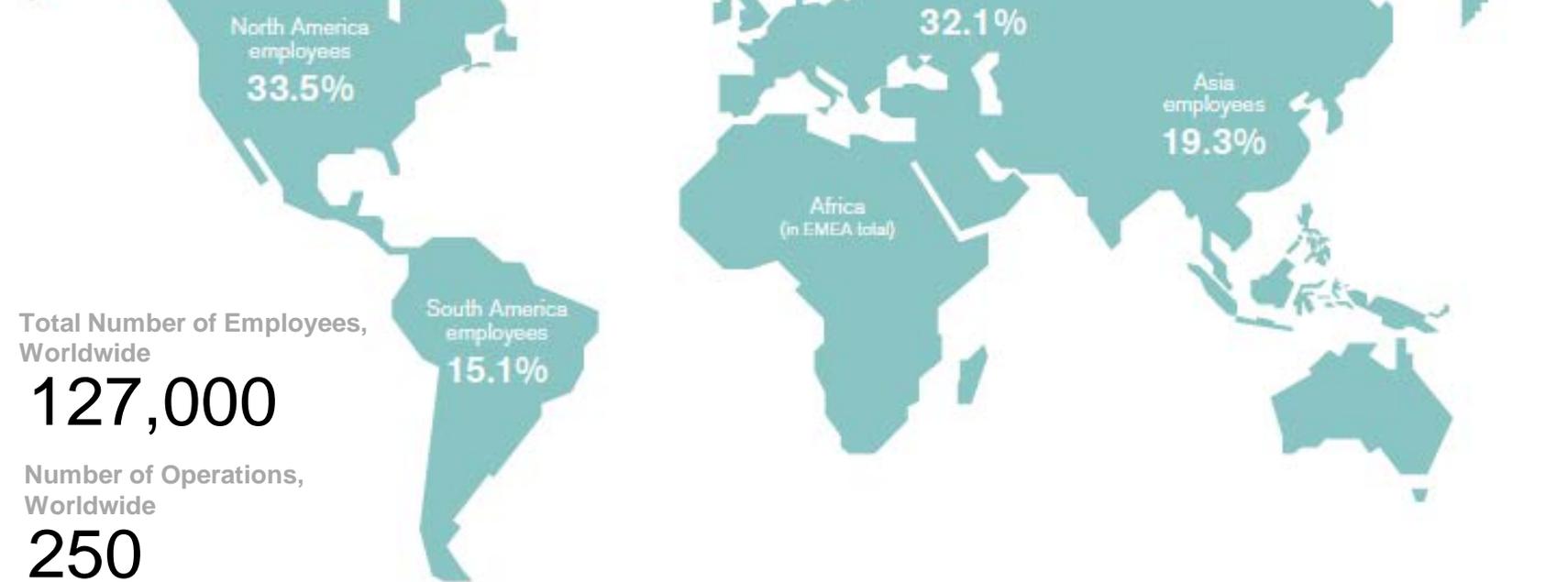
May 2016

Dan Cassidy

Sr. Manager, Energy & Conservation

Enterprise Facility Management - Americas

Organizational Profile



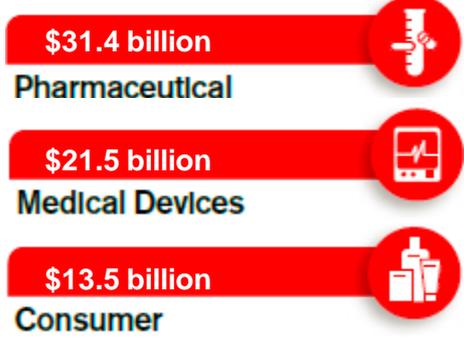
Total Number of Employees, Worldwide
127,000

Number of Operations, Worldwide
250

Total Net Sales, Worldwide
\$70.1 billion

Total Products and Product Variations
389,000

2015 Sales



Johnson & Johnson

is the world's most comprehensive and broadly based manufacturer of health care products, as well as a provider of related services, for the Consumer, Pharmaceutical, and Medical Devices markets.

Our Credo

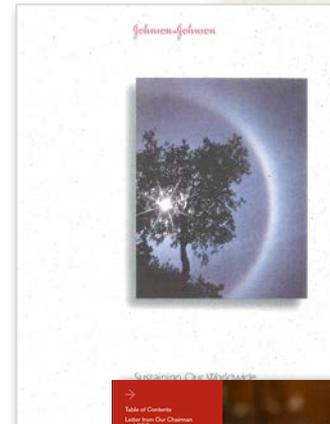
- Created by Robert Wood Johnson in 1943, just before J&J became a publicly traded company
- Our Credo defines our responsibilities to: the patients and consumers we serve, our employees, the communities in which we live and work and the natural resources we are privileged to use, and to our shareholders
- Our Credo continues to provide us with a guiding framework for conducting business responsibly and sustainably

“We must maintain in good order the property we are privileged to use, protecting the environment and natural resources.”



Our Citizenship & Sustainability Journey

- Our Credo
 - 1943: Created by Robert Wood Johnson
- Environmental Leadership
 - 1990: First pollution prevention goals
- Sustainability Goals
 - 1993: First Sustainability report
 - 2000: “Next Generation” goals
- 2005: “Healthy Planet” 2010 goals
Citizenship & Sustainability Goals
 - 2010: “Healthy Future” 2015 goals –
First set of comprehensive goals covering environmental, social, governance and economic aspects of our business
 - 2015: Citizenship & Sustainability 2020 goals



Why Sustainability?

“At Johnson & Johnson, we understand the intrinsic link between a healthy environment and human health. As the world’s largest and most broadly-based health care company, our mission is to help people live longer, healthier and happier lives. Our Credo defines our responsibilities to people and the planet, and our citizenship and sustainability practices are an important part of fulfilling this commitment.”

Source:

- **Fact Sheet: White House Announces Commitments to the American Business Act on Climate Pledge**
October 2015

Recent Public Activities



September 23rd, 2015

Johnson & Johnson Commits to New Energy and Climate Goals



New Science Based Public Goals

- Reduce our absolute carbon emissions by 20% by 2020 and 80% by 2050
- Produce/procure 20% of our electricity from clean/renewable energy sources by 2020, aspire to power all of our facilities with renewable energy by 2050

October 19th, 2015

Our Commitment to the Environment

By Jed Richardson, Global Energy Director for Johnson & Johnson

AMERICAN BUSINESSES ARE TAKING BIG STEPS TO COMBAT CLIMATE CHANGE

81 companies with more than 9 million employees in all 50 states are making at least \$160 billion in new low-carbon investments.

It's time to #ActOnClimate.

PROUD U.S. BUSINESS for CLIMATE ACTION

The graphic has a dark blue background. On the left, there is white and green text. On the right, there is a white hexagonal logo with a green outline, containing a map of the United States. Below the logo is the text "PROUD U.S. BUSINESS for CLIMATE ACTION".

How? J&J CO₂ Capital Funding Process

Established 2004

Criteria:

- \$40 million per year in capital relief for projects worldwide
- Projects provide good financial returns:
15% Internal Rate of Return
- Projects must provide meaningful CO₂ reduction

How? Enterprise Energy Management System

Goals/Standards



Johnson & Johnson Climate Friendly Energy Policy

Our Creed is the foundation for our Climate Friendly Energy Policy. It provides us with a clear, compelling and enduring reminder of our responsibilities. Our Creed states we must be good citizens in the global community; we must protect the environment and natural resources:

GHG emissions, companies should lead by implementing voluntary reductions of GHGs within their control. Companies should continually strive to improve the energy efficiency of their operations, products, and services.

Policy for the Sustainable Design and Construction of Johnson & Johnson Facilities
September 17, 2012

ISSUED BY:
Johnson & Johnson
Worldwide Engineering & Technical Operations
Worldwide Environment, Health & Safety

APPROVED BY:

Brian Boyd
BRIAN BOYD
Vice President, Worldwide Environment, Health & Safety

Jim Breen
JIM BREEN
Vice President, Worldwide Engineering & Technical Operations

Robert Salerno
ROBERT SALERNO
Vice President, Global Supply Chain

Energy Programs

Demand Side:

- PROJECT COLD**
CHILLER OPTIMIZATION LOOP DEPLOYMENT
- PROJECT HOT**
HEATING OPTIMIZATION TECHNOLOGY
- PROJECT AIR**
COMPRESSED AIR INNOVATIVE RECOVERY
- PROJECT n-AIR-g**
ENERGY OPTIMIZATION AHU'S
- PROJECT RELIGHT**

Supply Side:

Clean Technologies

Tools/Governance

Johnson & Johnson CO₂ Reduction Project Summary Guide

A highlight of completed projects put through the Capital Funding Process in support of reaching Johnson & Johnson CO₂ Reduction Goals.

December 2013

ETHICON SAN LORENZO

EFFICIENCY: 1,040 kW/ton

SAVINGS: 87.4% WEATHER: 77.0°F OPTIMIZATION: OFF

JANSSEN LA JOLLA

EFFICIENCY: 0,567 kW/ton

SAVINGS: 84.2% WEATHER: 78.1°F OPTIMIZATION: FULL

SKILLMAN NORTH

EFFICIENCY: 0,678 kW/ton

SAVINGS: 37.5% WEATHER: 0°F OPTIMIZATION: FULL



CLEAN GENERATION

Clean Energy Challenges & Opportunities

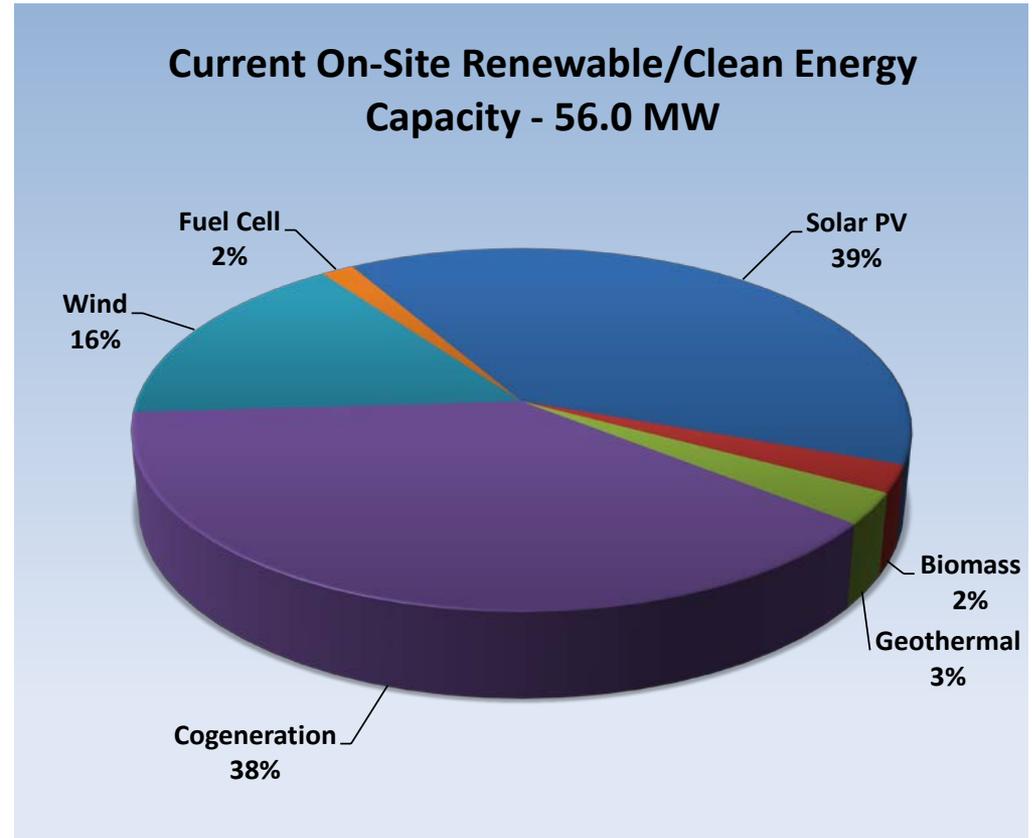
- As with all sustainability efforts we need to balance the needs of our business with the needs of society and the environment.
- Historically, to achieve a fair economic return, renewable energy has been heavily dependent on incentives from local governments. We diligently search for opportunities to install these systems where they make sense financially.
- In recent years incentives have been decreasing in some parts of the world but the cost of the renewable energy systems has also been decreasing due to economies of scale.
- We are continuing to install clean and renewable energy systems on our properties where they make financial sense. We are currently executing a pipeline of opportunities which will include additional wind, solar, and geothermal systems at various locations throughout the world. We are also evaluating opportunities to procure renewable electricity through the power purchase agreement mechanism which would allow new renewable systems to be financed and built on our behalf.

Commitment to Clean Energy on Our Properties

Currently 56 MW installed or in-progress

- 33 Solar
- 14 Cogeneration
- 2 Biomass
- 3 Geothermal
- 3 Wind
- 2 Fuel Cell

Project pipeline: 15MW



Cogeneration & Fuel Cell Projects



Janssen R&D,
Springhouse PA
3800 kW MWM



ASP, Irvine CA
500 kW Bloom



Lifescan,
Inverness UK
229 kW Mercedes



Vistakon,
Limerick Ireland
3000 kW Tri-Gen

Wind Projects

Janssen, Cork Ireland
3000 kW Enercon



DePuy Synthes, Cork Ireland
3000 kW Enercon



Solar Projects



San Lorenzo, PR
600 kW



Gurabo, PR
2600 kW



Geel, Belgium
330 kW

Titusville, NJ
4100 kW



In Summary...

- Our Credo
- Link to Mission
- Build the Business Case
- Partner with Peers & External Organizations
- Develop & Implement Programs – Make Success Repeatable
- Communicate!

Thank You



eco
ENVIRONMENTAL
COLLABORATION
OFFICE

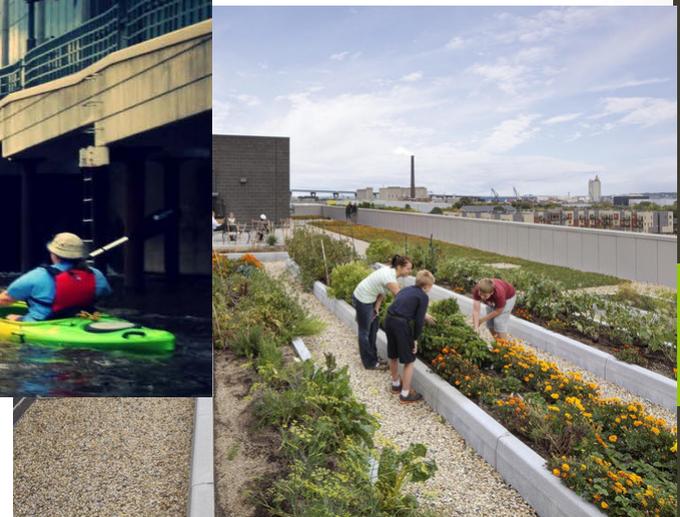
ecoCITY of MILWAUKEE

Senior Leadership Language to Advance Energy Efficiency

Lessons from the eco City of Milwaukee

CITIES & SUSTAINABILITY

The City of Milwaukee the Environmental Collaboration Office (ECO) was created by Mayor Tom Barrett to enhance Milwaukee's sustainability and position the city as a national leader in sustainability performance. ECO has helped thousands of homeowners and hundreds of businesses and organizations achieve their sustainability goals while reducing emissions, waste and resource inefficiencies. As a result of ECO strategic investments in the community, over \$35 million of economic activity has been stimulated since 2010.

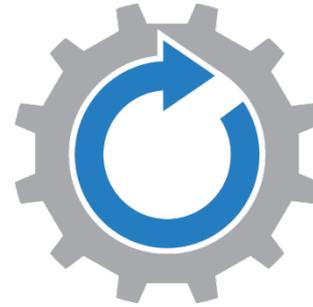


Milwaukee Energy Programs



Me2
MILWAUKEE
ENERGY
EFFICIENCY

ecoCITY of MILWAUKEE



ME3
MILWAUKEE
SUSTAINABLE
MANUFACTURING

ecoCITY of MILWAUKEE



PACE
FINANCING

ecoCITY of
MILWAUKEE

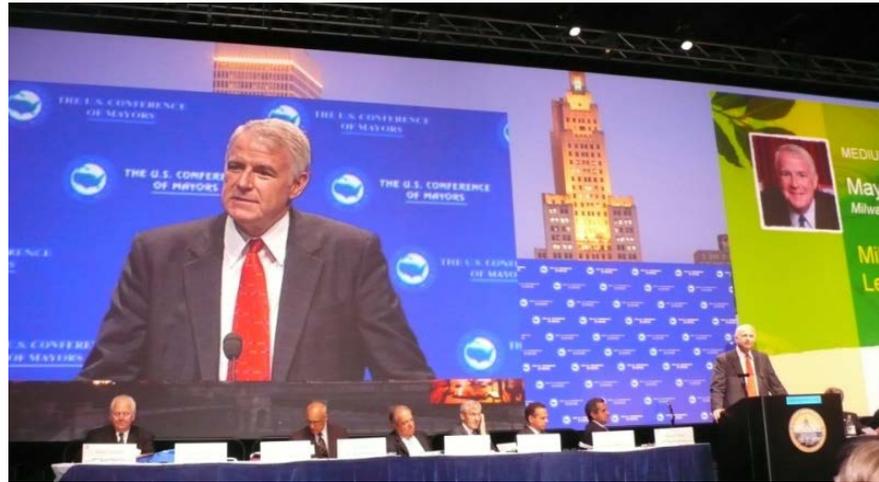


Milwaukee
SHINES

ecoCITY of
MILWAUKEE



Better Buildings
CHALLENGE
U.S. DEPARTMENT OF ENERGY
MILWAUKEE



Mayor Tom Barrett

*To speak the leadership
language, listen to your leader*

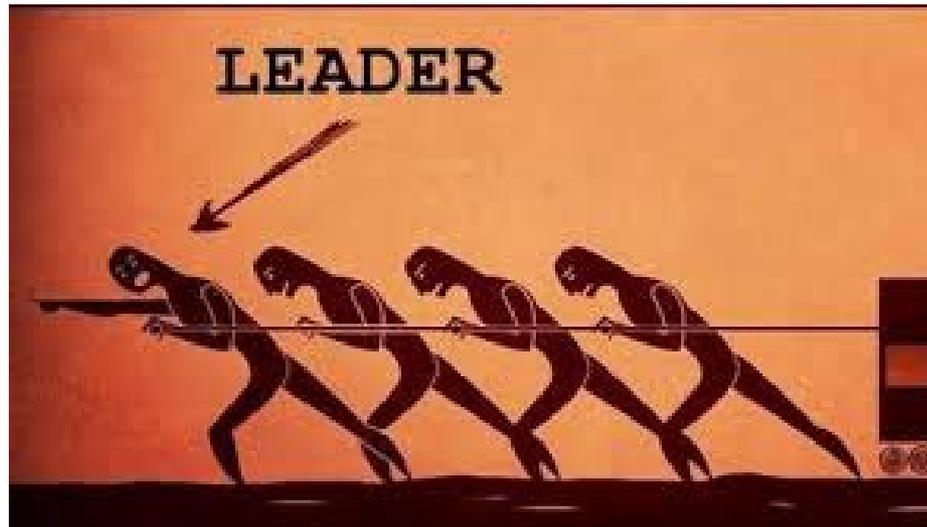
Mayor Barrett's Language

- Jobs
- Economic Development
- Economy and ecology can and should work together
- Better Building stock
- Low risk, high return
- Win-wins
- Collaboration and partnerships



Leadership is Influence

*To speak the language of senior leadership,
be a leader yourself.*



Make it an easy “Yes”

- Don't tell the senior leader what he/she should do; ask if you can do it
- Set goals, lay out a clear path to success, make it happen.
- Demonstrate success on small projects first
- Don't fight over scarce resources; grow the resources
- Market your energy programs based on your customer's needs and core concerns.



Other Notes

- Data details are for managers, not senior leaders
- Have two key metrics
 - Percent energy reduction
 - Dollars saved
- No jargon
 - Submetering
 - Retrocommissioning
 - Retrofits
 - MMBTUs, kwh, therms, etc. (remember, percent energy reduction)

The New Triple Bottom Line





“Working together, we can make Milwaukee a world class eco-city.”

– Mayor Tom Barrett

STAY CONNECTED

[Milwaukee.gov/eco](https://milwaukee.gov/eco)

[Refreshmke.com](https://refreshmke.com)

Twitter: [@ecocitymke1](https://twitter.com/ecocitymke1)

Email: eshamb@milwaukee.gov