Putting a Price on Carbon: Increasing Accountability & Driving Culture Change

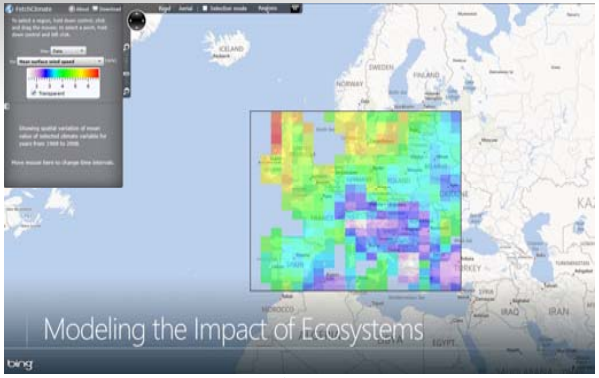
Ray Pinto
Senior Government Affairs Manager

Microsoft

How we think about the challenge

Enable Energy Efficiency

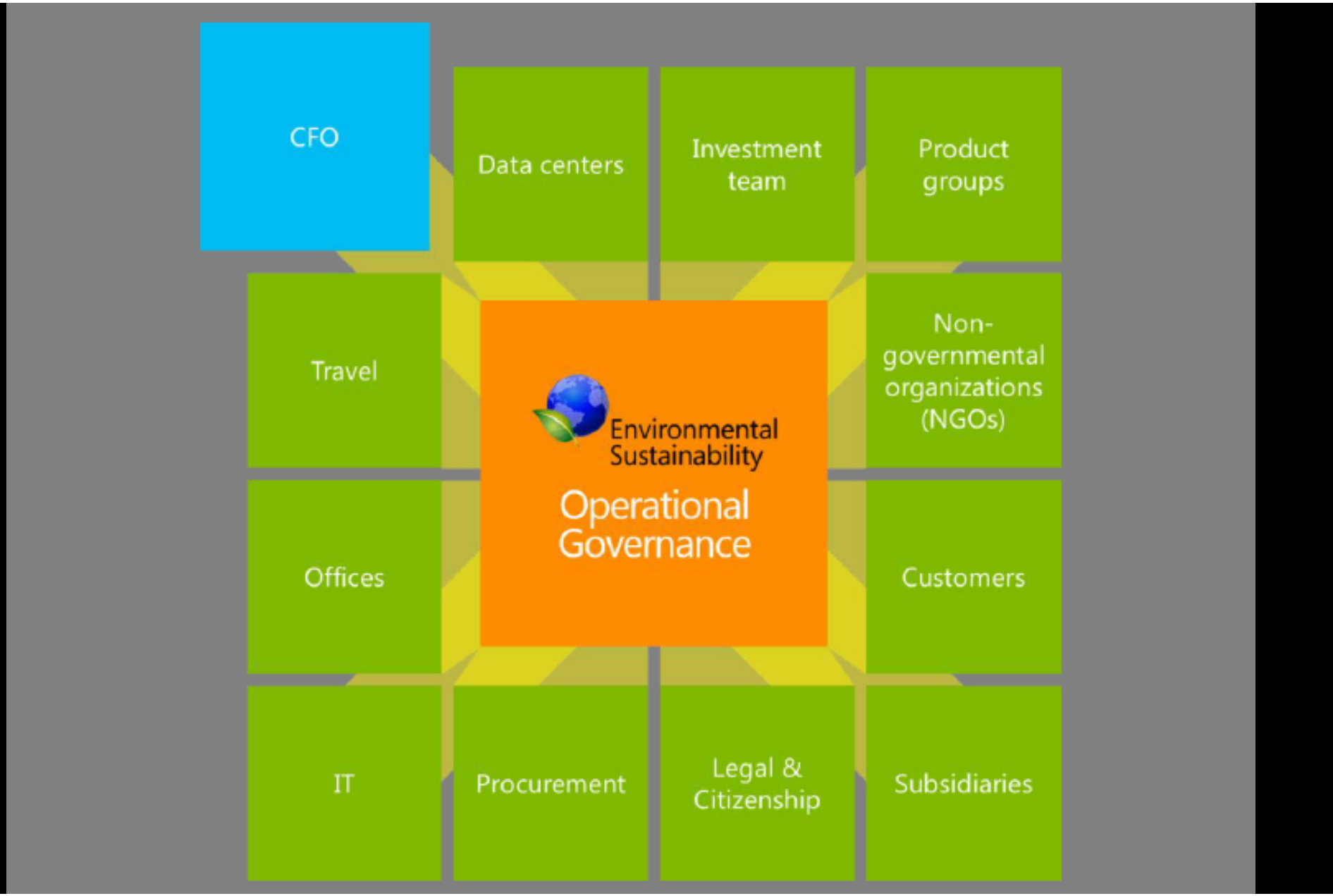
Accelerate Research Breakthroughs

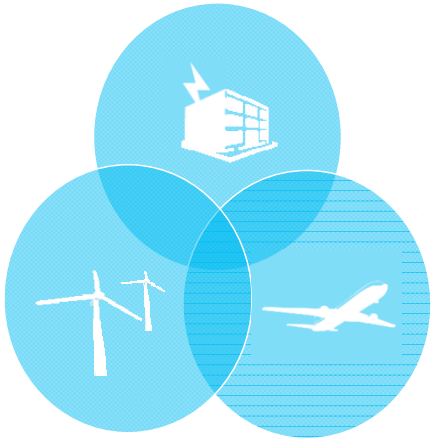


Demonstrate Responsible Environmental Leadership

Data


carbonfee™
Reduced energy use and employee air travel
Efficiency
Reduced carbon footprint
Reduced cost
Alignment with code of ethics
Responsibility
Risk mitigation
Regulatory compliance
Citizenship projects
Leadership
Innovation


CFO
Data centers
Investment team
Product groups
Travel
Environmental Sustainability
Operational Governance
Non-governmental organizations (NGOs)
Offices
Customers
IT
Procurement
Legal & Citizenship
Subsidiaries



carbon fee

Set in consultation with the Office of the CFO based on the average price of renewable energy and carbon offset projects globally

Sales, Marketing, & Services Group (SMSG; COO)	Advanced Strategy and Research Group (ASE)	Cloud and Enterprise Engineering Group (CEE)	Operating Systems Engineering Group (OSE)	Devices and Studios Engineering (DSE)

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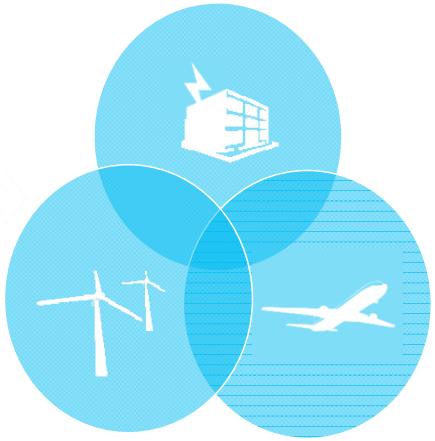
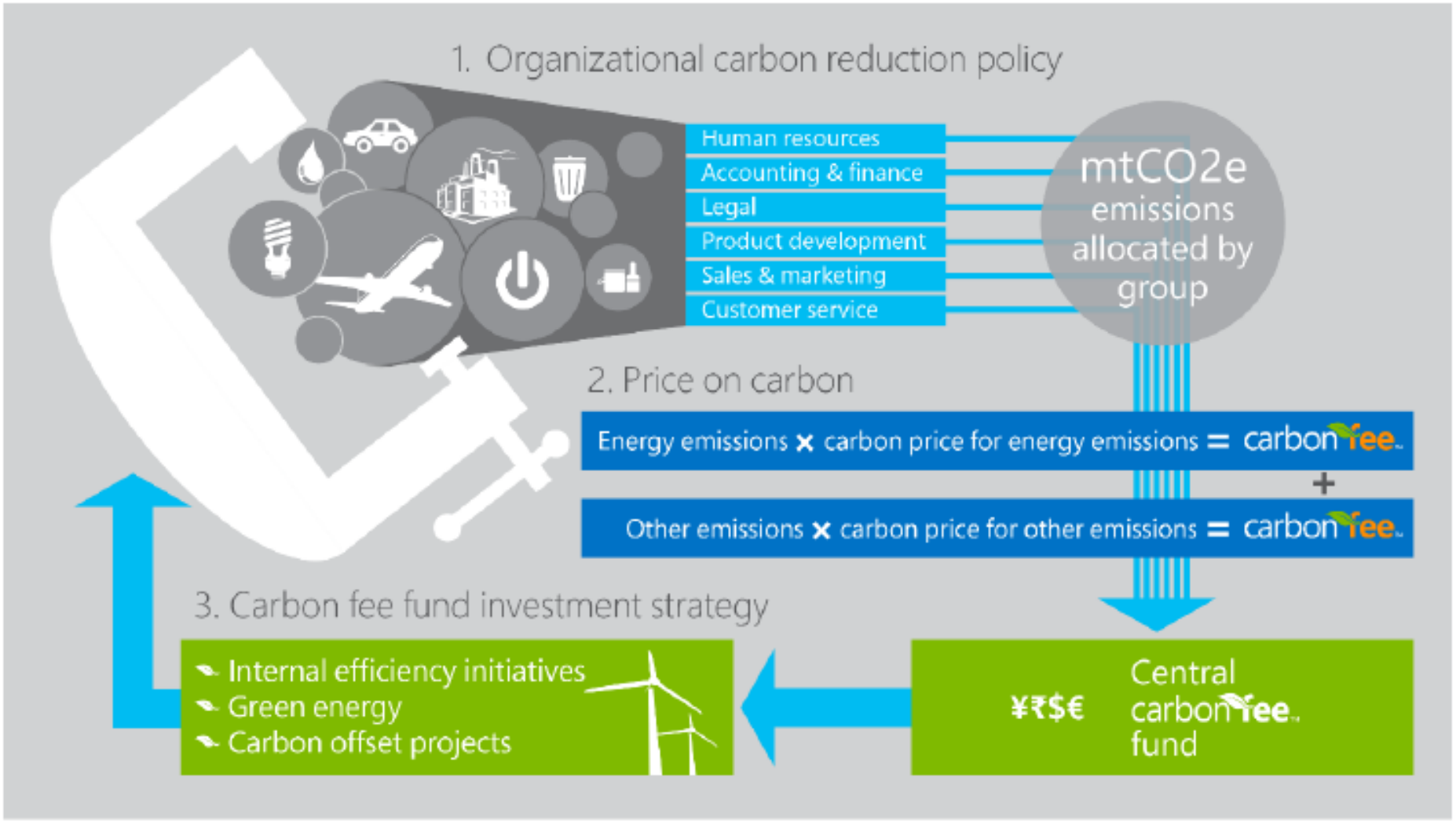
Central fund

Investments in internal carbon reduction, green power, carbon offset projects, and hardware recycling



CARBON FEE: How it works

The three primary components of our carbon fee model



- 15M sq. ft. / 118 Buildings
- 30k pieces of mechanical equipment
- 7 major bldg mgt systems
- 500 million data points collected per day
- $1.5M in cost savings in first year

A **LIVING LAB**: Microsoft's Puget Sound Campus

Chifeng Wind Power China

Jogimatti Wind Power India

Soma Wind Power Turkey

Ankara Landfill Gas to Energy Turkey

Brazil Farm Methane Brazil

Acre Amazonian Rainforest Conservation REDD+, Brazil

Cerâmica Menegalli Biomass Brazil

Oddar Meanchey Community REDD+, Cambodia

Meru & Nanyuki Community Reforestation, Kenya

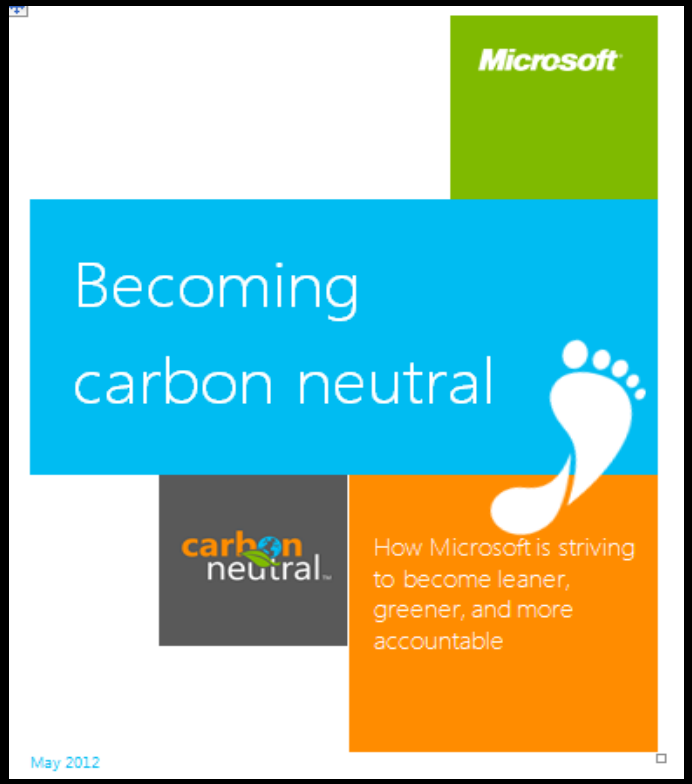
Alto Mayo REDD+, Peru

Guatemala Water Filtration & Cookstoves, Guatemala

Mongolian Insulation & Energy Efficiency, Mongolia

Whitepapers

aka.ms/carbonfee



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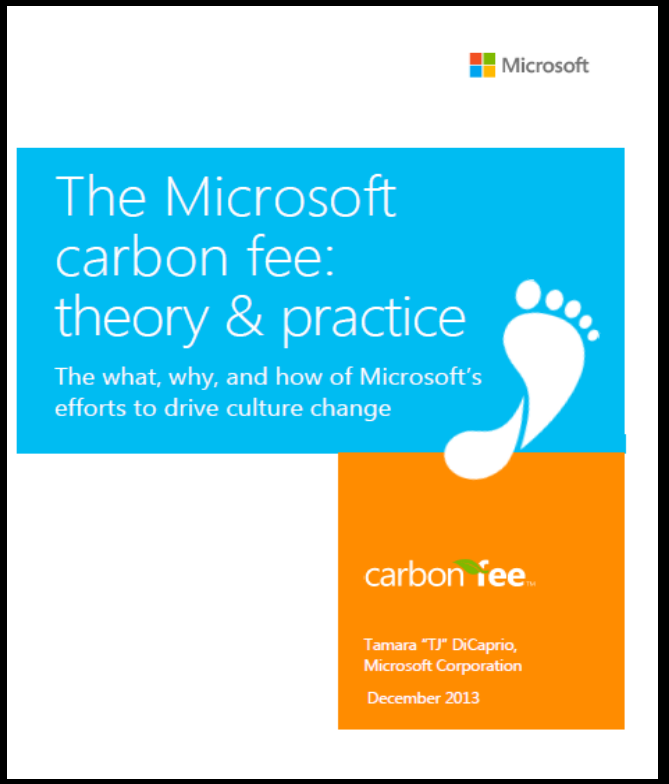

About the author

Tamara ("TJ") DiCaprio is responsible for reducing the global environmental operational footprint at Microsoft. TJ joined the Microsoft Environmental Sustainability group in 2010 and since that time has worked closely with the Environmental Sustainability, Citizenship, and Finance teams to develop an internal carbon footprint strategy, establish an internal governance model, and shape internal corporate carbon reduction policy direction. She was the chief architect behind the development and implementation of Microsoft's carbon neutral policy and carbon fee model. TJ was recognized by the US Congress and received the 2013 EPA Individual Climate Leadership Award for her work in establishing bold mitigation efforts to climate change at Microsoft.


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important when designing a carbon fee model:

step 1 Calculate your carbon impact	A. Complete a carbon emissions inventory B. Improve transparency using emission- and energy-tracking software
step 2 Establish a carbon reduction policy and develop an investment strategy	A. Identify your accountable stakeholders B. Establish an internal carbon reduction policy C. Define your carbon fee emissions boundary and allocation structure D. Develop your carbon fee fund investment strategy
step 3 Determine your internal carbon price	A. Set your carbon price B. Calculate projected costs by group
step 4 Gain approval and establish governance and feedback loops	A. Gain approval for your model B. Establish an internal cross-organizational committee to provide ongoing input and guidance
step 5 Administer the fee, communicate results, and evolve to increase impact	A. Allocate the carbon fee B. True up to actuals C. Communicate progress internally D. Report on your emissions performance externally E. Plan for the future