GREEN

POWER

MARKET DEVELOPMENT GROUP

Advancing green power for a clean energy future

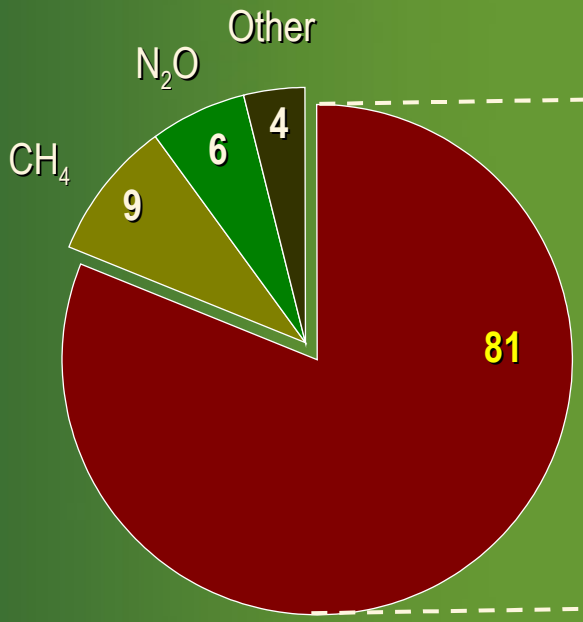
World Resources Institute
Business Initiatives for Worldwide Climate Protection

19:30 – 21:00
December 1, 2005
Montreal, Canada

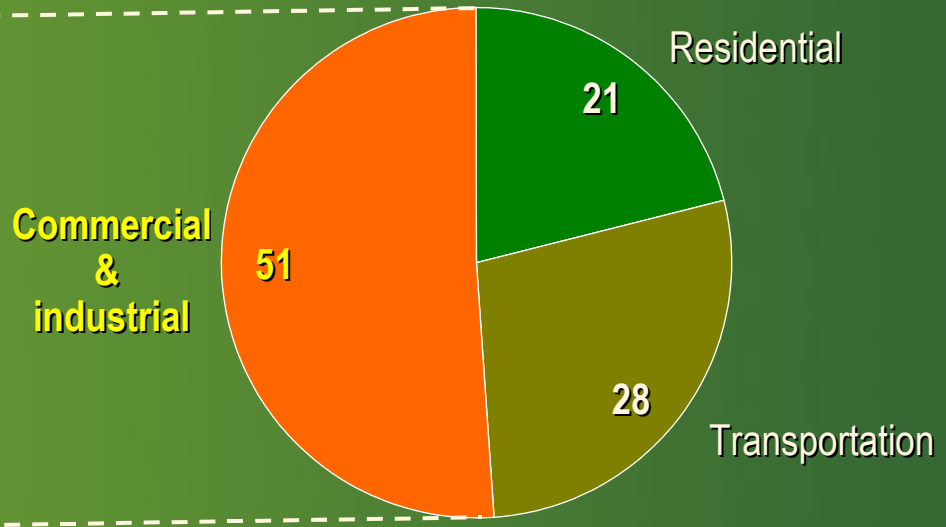
GREEN POWER MARKET DEVELOPMENT GROUP

Developing corporate markets for renewable energy is important for addressing climate change

U.S. greenhouse gas emissions, 2002*
Percent, 100%= 6,935 million metric tonnes CO_2e



U.S. energy consumption by end use sector, 2002
Percent, 100%= 98 quadrillion Btu



* Excludes land use change and international bunkers

Source: Climate Analysis Indicators Tool (CAIT UNFCCC) Version 1.0 beta. Washington, DC: World Resources Institute; 2005Energy Information Administration. 2005. *Annual Energy Review 2004: Energy Consumption by Sector*, U.S. Department of Energy

The Green Power Market Development Group

Developing corporate markets for 1,000 MW of new, cost-competitive green power by 2010 in the US

- Alcoa Inc.
- The Dow Chemical Company
- DuPont
- FedEx Kinko's
- General Motors
- IBM
- Interface
- Johnson & Johnson
- NatureWorks, LLC
- Pitney Bowes
- Staples
- Starbucks

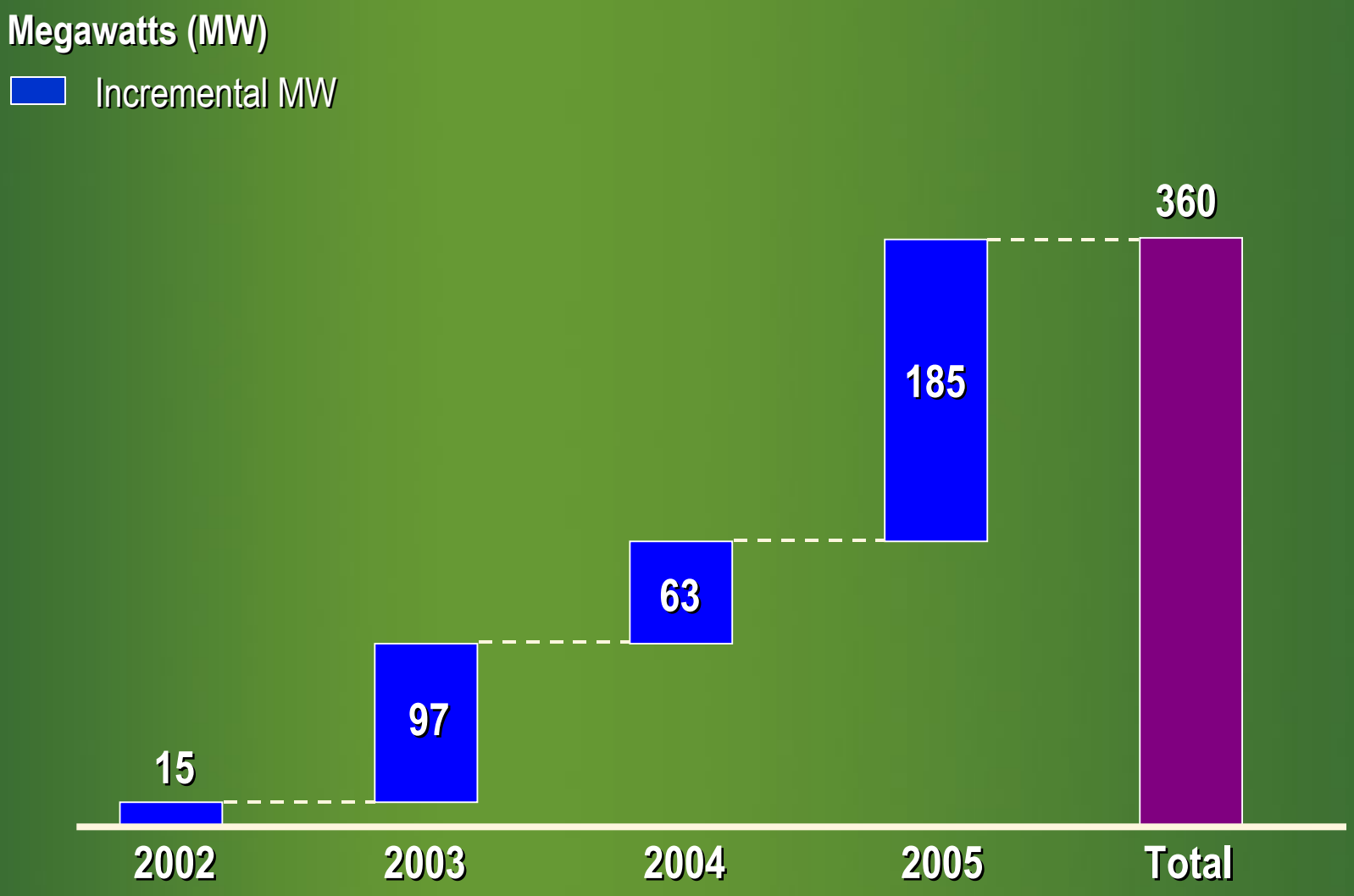
What does the Group do?

- Identify opportunities
  - Build business case
  - Conduct market research
  - Identify project opportunities
- Engage marketplace
  - Engage renewable energy suppliers & developers
  - Submit RFPs (aggregations when appropriate)
  - Evaluate projects & economics
- Implement projects / make purchases
- Share strategies & lessons learned
  - With one another
  - With others
- Communicate externally
  - Publicize projects
  - Share lessons

Benefits of Group to members

- Accelerated learning process
- Timely information
- Links to suppliers/developers
- Technical assistance, tools & creative solutions
- Network of peers
- Shared business cases, purchasing & financing strategies, experiences, and lessons learned
- Aggregation opportunities
- Public recognition for purchases/projects

The Group is gaining momentum . . .



In 2005 the Group more than doubled its use of renewable energy, hitting the 360 MW mark

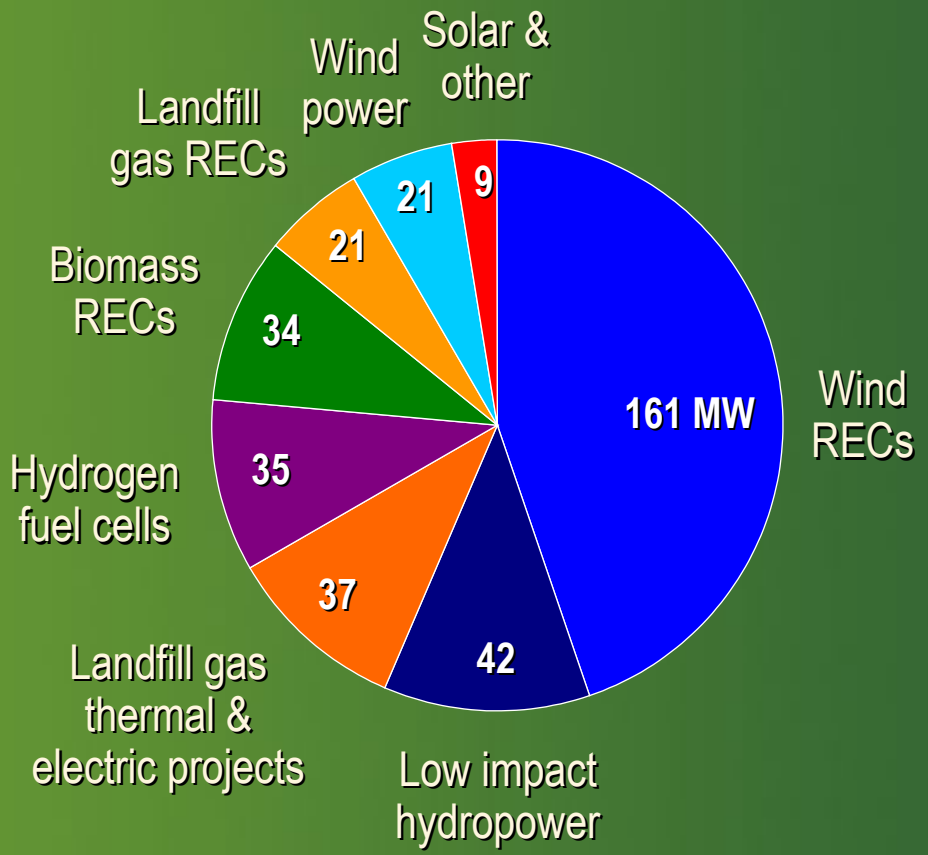
2005 projects & purchases

*Total = **185** megawatts (MW)*

Product	MW
Wind RECs	138
Low impact hydropower	42
Solar & other	3
Biomass RECs	2

Total projects & purchases since 2000

*Total = **360** MW*



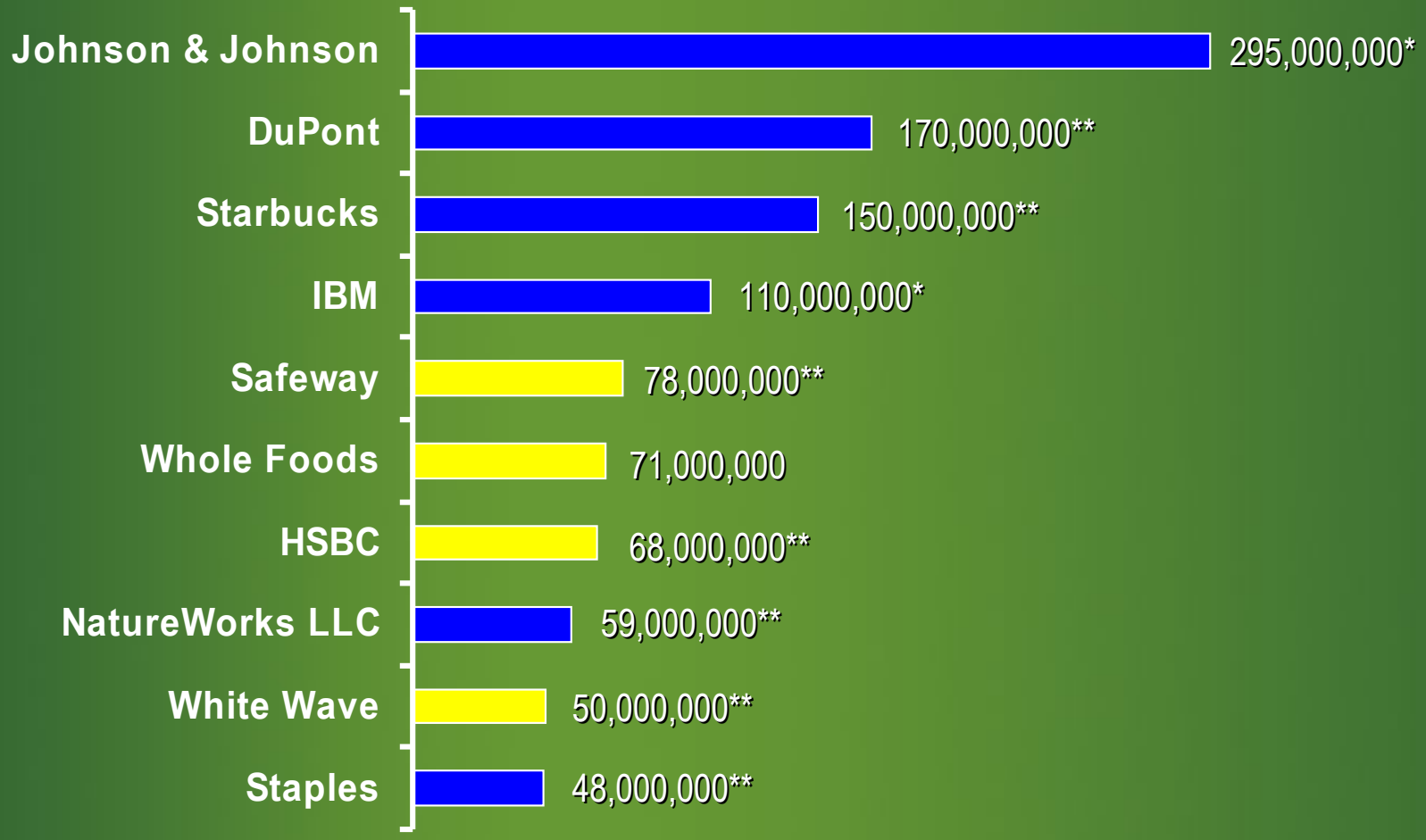
Areas where Group has had leadership impact on market

- Renewable energy certificate market
- Landfill gas for corporate on-site thermal energy
- On-site solar PV: Pioneering innovative financing approach
- Certified low-impact hydropower
- Hydrogen fuel cells
- Building the business case
- “Blazing trail for others to follow”

Ten largest corporate purchases of RECs / green power in U.S.

kWh/year (as of November, 2005)

Member of Green Power Group



* Mix of RECs and green power purchases

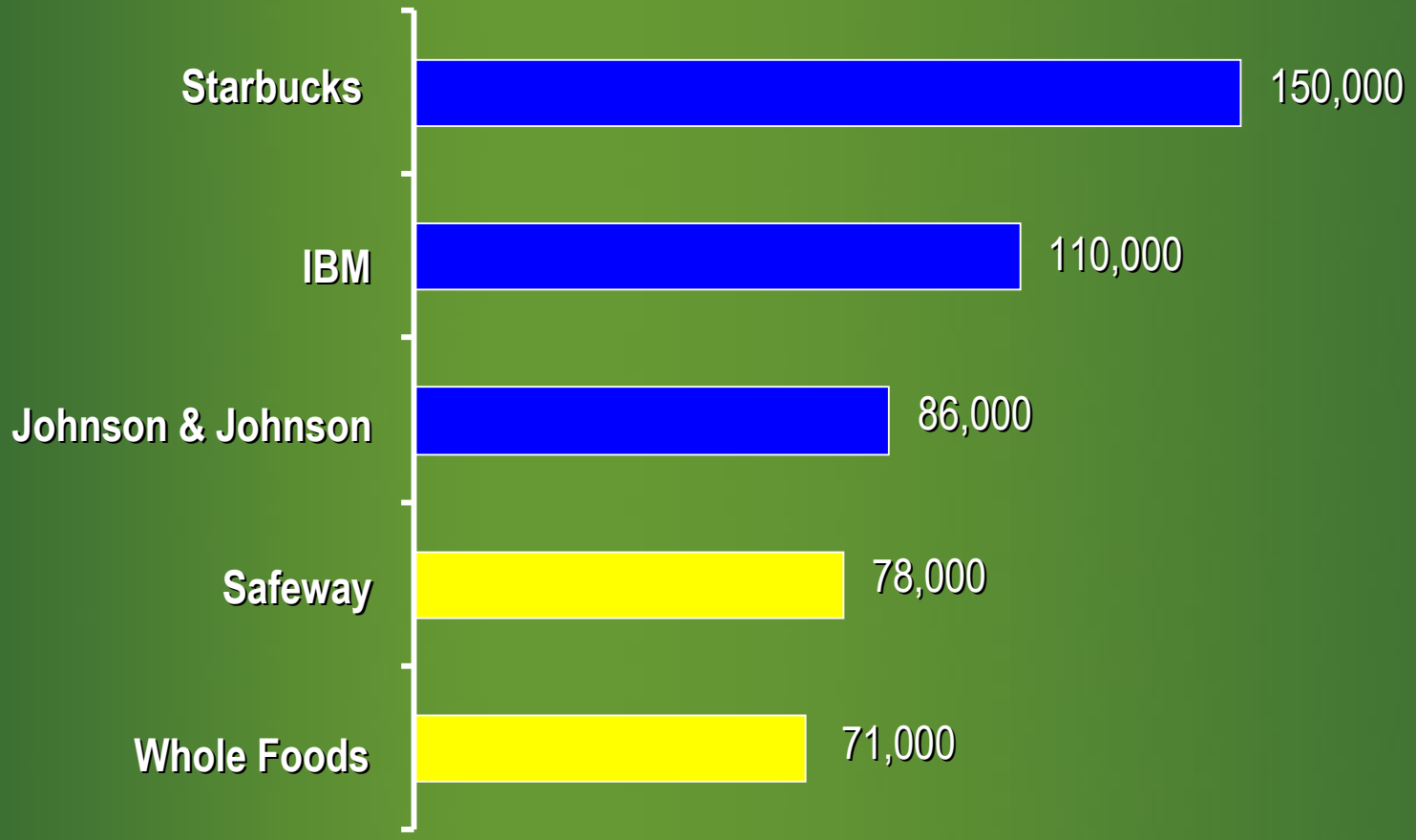
** RECs

Source: U.S. Environmental Protection Agency, WRI GPMDG project progress database

Five largest corporate purchases of wind RECs / green power in U.S.

MWh/year (as of Dec, 2005)

Member of Green Power Group



Source: U.S. Environmental Protection Agency

Seven Group members now purchase green power or RECs for 10% or more of their U.S. electricity consumption (above and beyond government mandates)

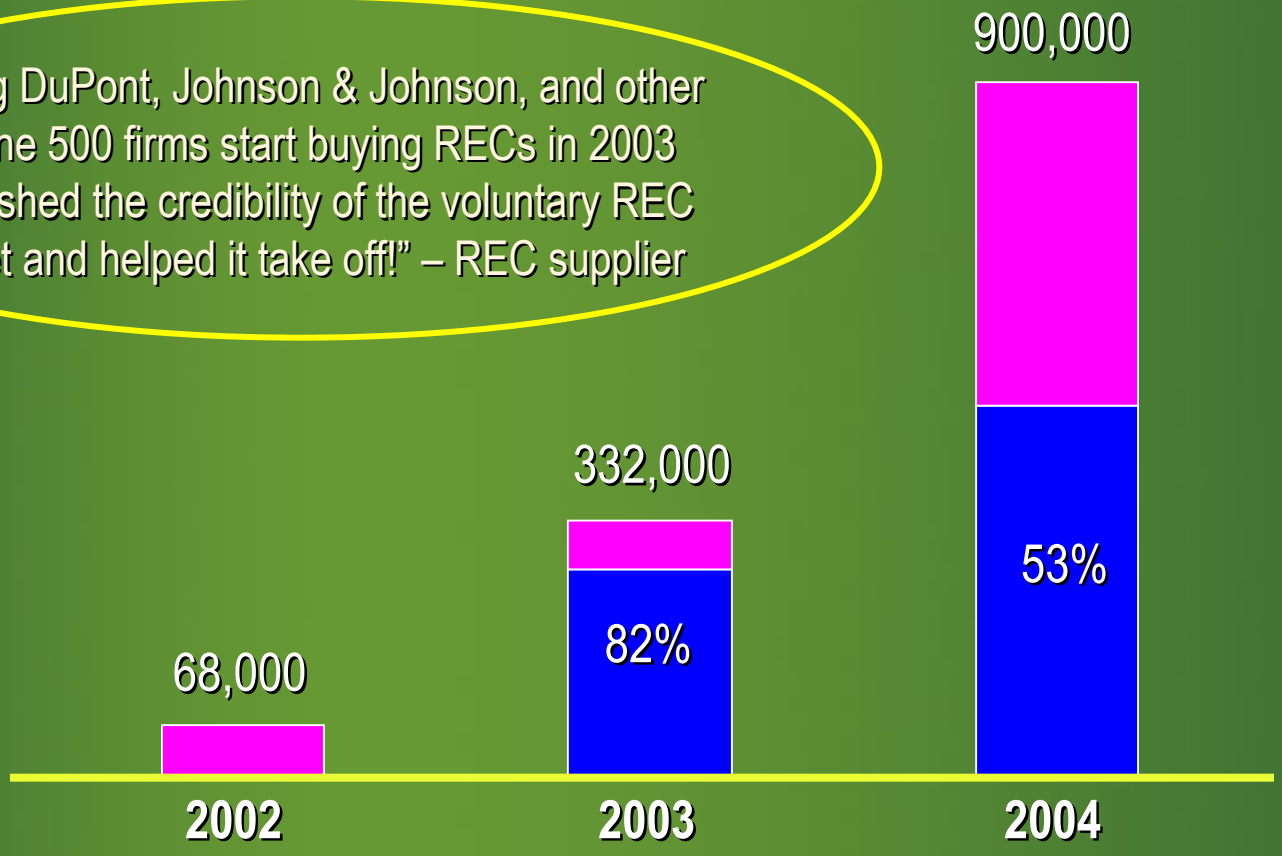
NatureWorks®	100%
Johnson & Johnson	28%
Starbucks Coffee	20%
FedEx Kinko's Office and Print Services	14%
Interface	10%
Pitney Bowes	10%
Staples — that was easy.℠	10%

The Green Power Group kick-started the popularity of certified RECs among non-residential energy users

MWh (as of September, 2005)

Green Power Group purchases

"Having DuPont, Johnson & Johnson, and other Fortune 500 firms start buying RECs in 2003 established the credibility of the voluntary REC market and helped it take off!" – REC supplier



Source: Center for Resources Soultions, Verification Report Year 2002, 2003; WRI GPMDG project progress database

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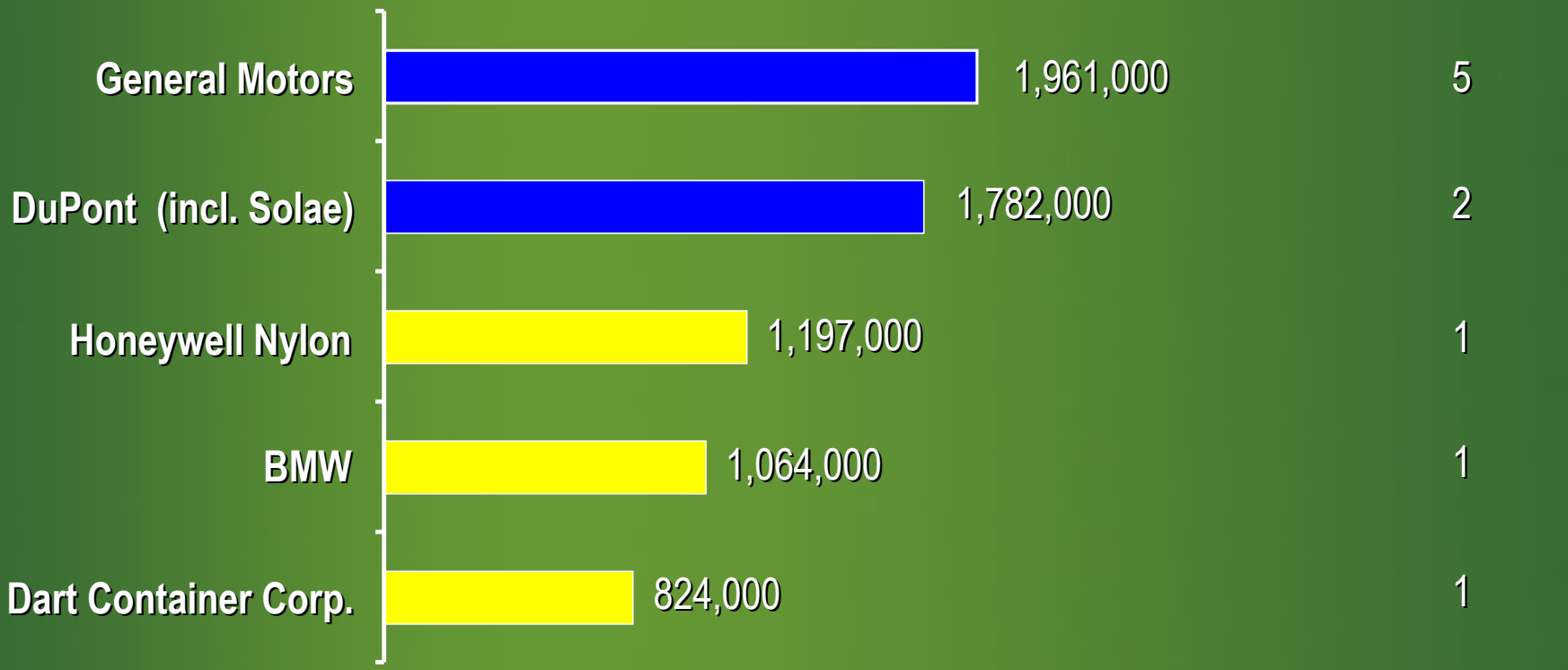
Five largest corporate users of landfill gas for thermal energy in the US

MMBtu/year (as of Sept, 2005)

Member of Green Power Group



Source: U.S. Environmental Protection Agency (Landfill Methane Outreach Program), 2005

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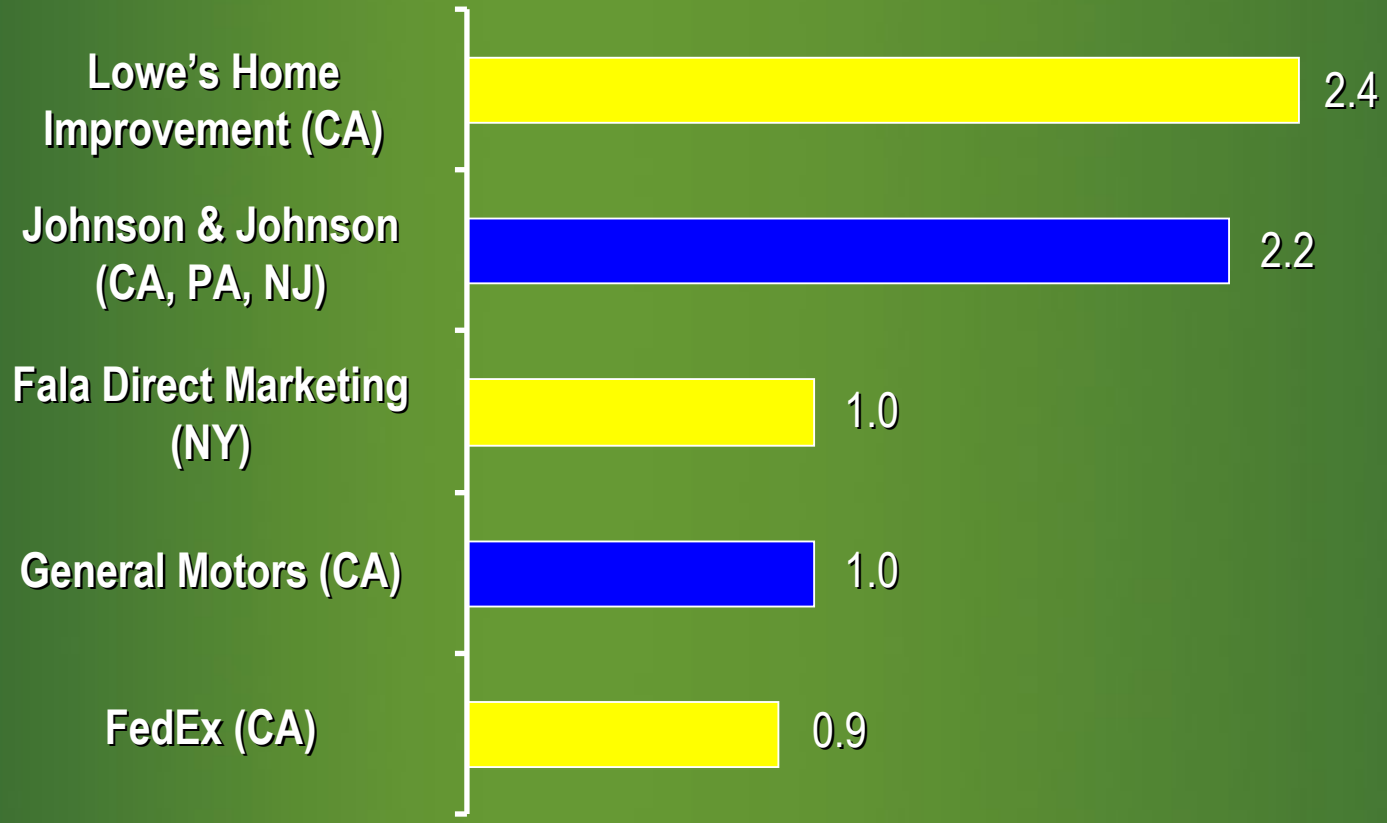
Five largest corporate users of on-site solar PV in the US*

MW (as of Sept, 2005)

Member of Green Power Group



* Excluding utilities, electricity suppliers, and major solar PV manufacturers

Source: Solar Electric Power Assocation (2005)

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Low Impact Hydropower Institute Certification – Alcoa

- **Alcoa's Tapoco project is the 2nd largest certified project in U.S. and first to receive special eight-year certification**
- **LIHI certification is voluntary and based on:**
  - A multi-stakeholder evaluation process, e.g., NRDC, American Rivers, technical experts
  - Strictly measured criteria including:
    - → Water quality
    - → Watershed protection
    - → Fish passage and protection
    - → Threatened and endangered species protection
    - → River flows
    - → Recreation and cultural resource protection

For more information visit www.lowimpacthydro.org

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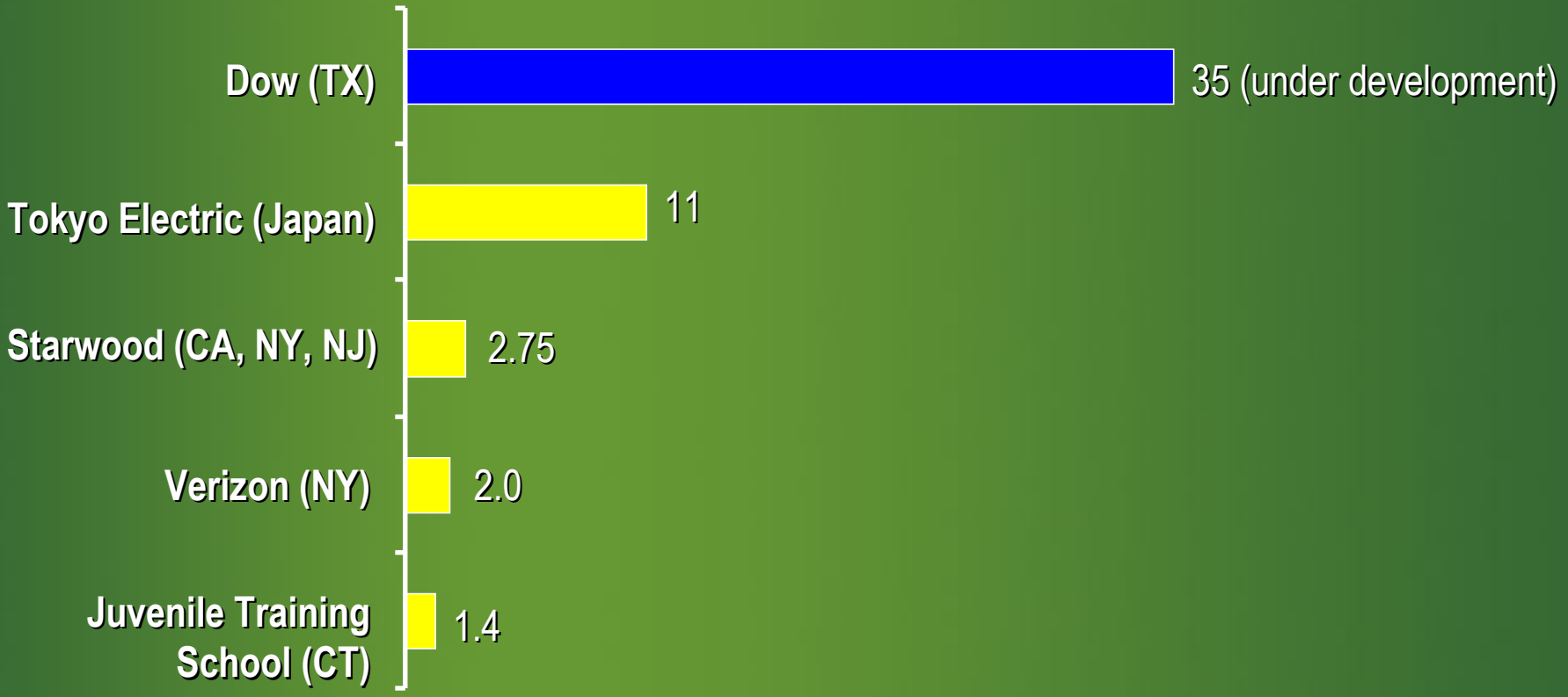
Five largest fuel cell projects in the world

MW (as of Dec, 2005)

Member of Green Power Group



Source: Fuel Cells 2000, Worldwide Fuel Cell Installation Chart, 2005

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Business case for using renewable energy

VARIES BY COMPANY

1. Reduce emissions
   - Regulated emissions
   - Unregulated emissions

2. Strengthen stakeholder relations
   - Customers / branding
   - Employees and local communities
   - Shareholders

3. **Lower or stable operating costs**
   - Lower corporate energy costs
   - Stable corporate energy prices (hedge against fossil fuel price fluctuations)

Source: Interviews

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Today, WRI & The Climate Group announce the launch of the Green Power Market Development Group – Europe

A unique partnership dedicated to building commercial and industrial markets for renewable energy in Europe

British Telecom

The Dow Chemical Company

DuPont

General Motors

Holcim

IKEA

Interface Europe

Johnson & Johnson

Nike (CSC)

Staples

Tetra Pak

THE CLIMATE GROUP


Thank you
For more information visit:
www.thegreenpowergroup.org