



Update on US Green Building Policies

41st APEC EGEE&C Meeting

Beijing, China

April 11, 2013

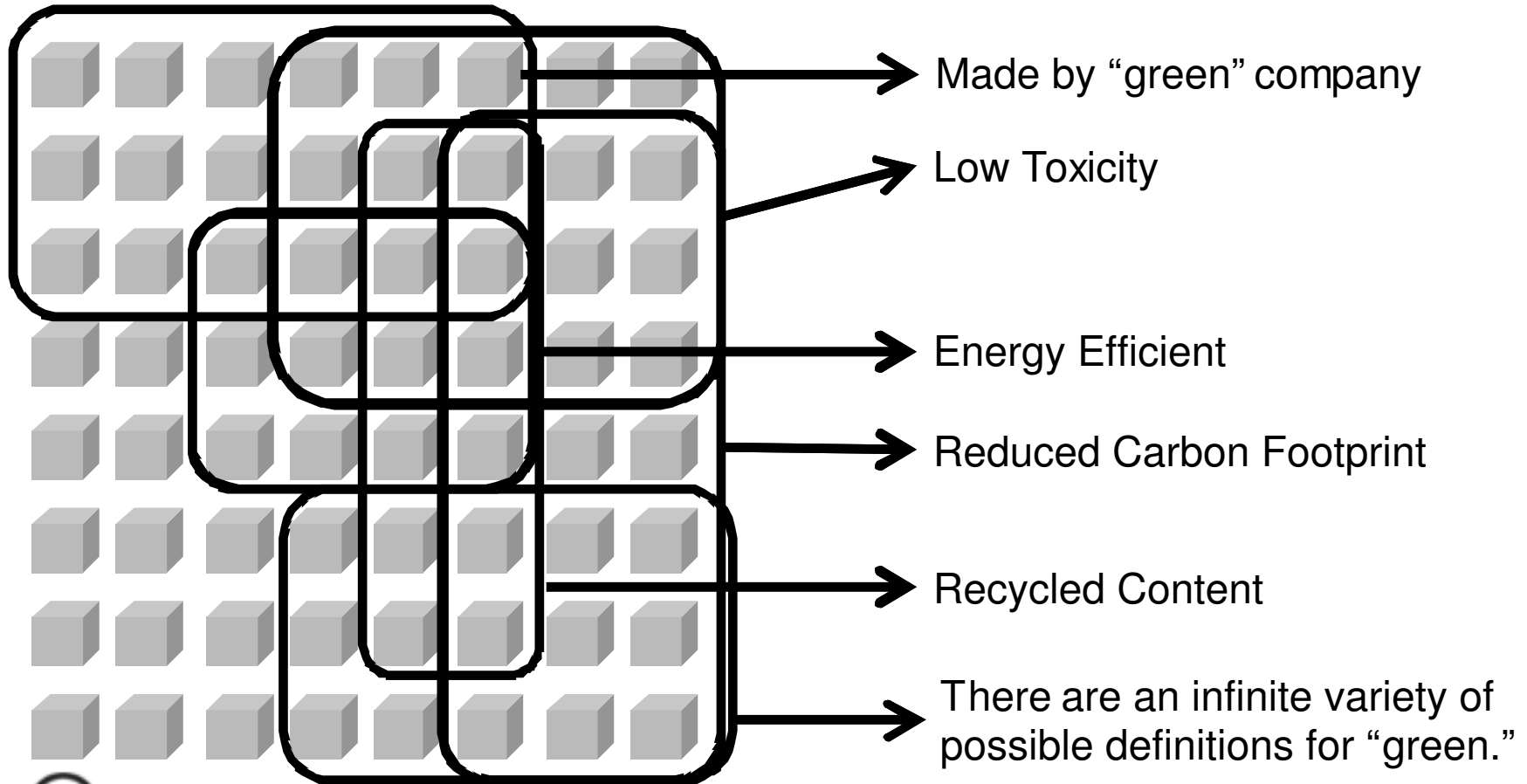
Buildings consume approximately
40 % of the world's energy
12% of the world's potable water
...and account for

more than 1/3

of the world's greenhouse gas emissions



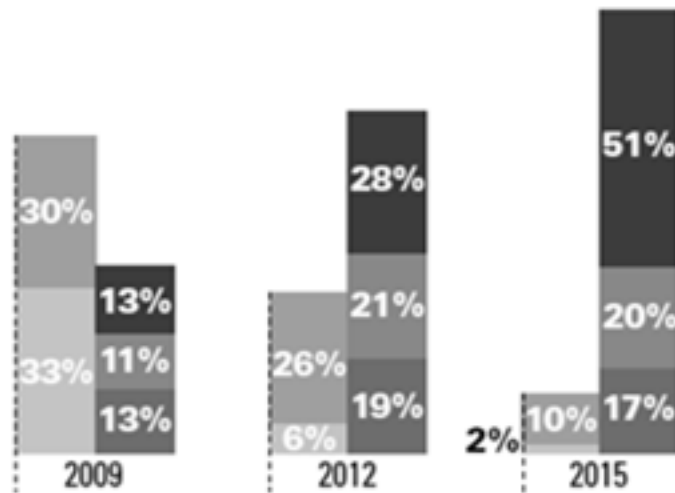
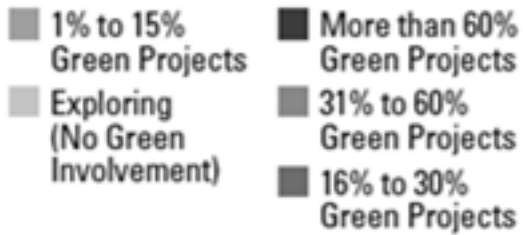
What does “Green” mean?



Green Buildings Moving Towards Tipping Point

Levels of Green Building Activity by Firms Around the World (2009–2015 Expected)

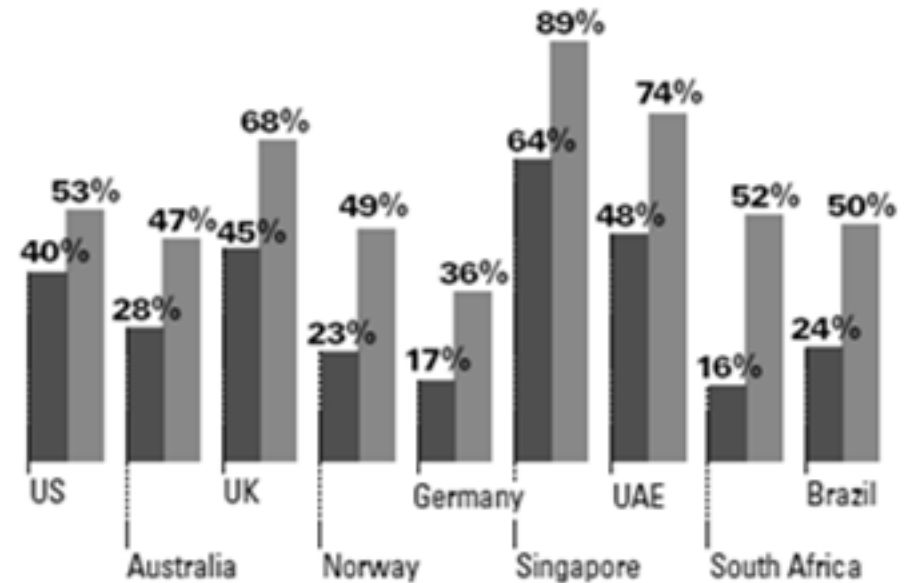
Source: McGraw-Hill Construction, 2013



Percentage of Firms With More Than 60% of Work Green (2012 and Expected for 2015)

Source: McGraw-Hill Construction, 2013

Legend: 2012 (Dark Gray), 2015 (Light Gray)



US Federal Government Policy

Requires Government to Walk-the-Talk

- E.O. 13514: Federal Leadership in Environmental, Energy and Economic Performance
- Section 433 of the Energy Independence and Security Act, EISA 2007
- Government review of green building rating systems
 - One size does NOT fit all
- US Government now >1,000 certified green building projects, >100 million sf



Better Building Initiative - DOE

- Launched in 2011 by President Obama
- Goal is to make commercial and industrial buildings 20% more energy efficient by 2020
- DOE Commercial Building Energy Asset Score

www.energy.gov/better-buildings

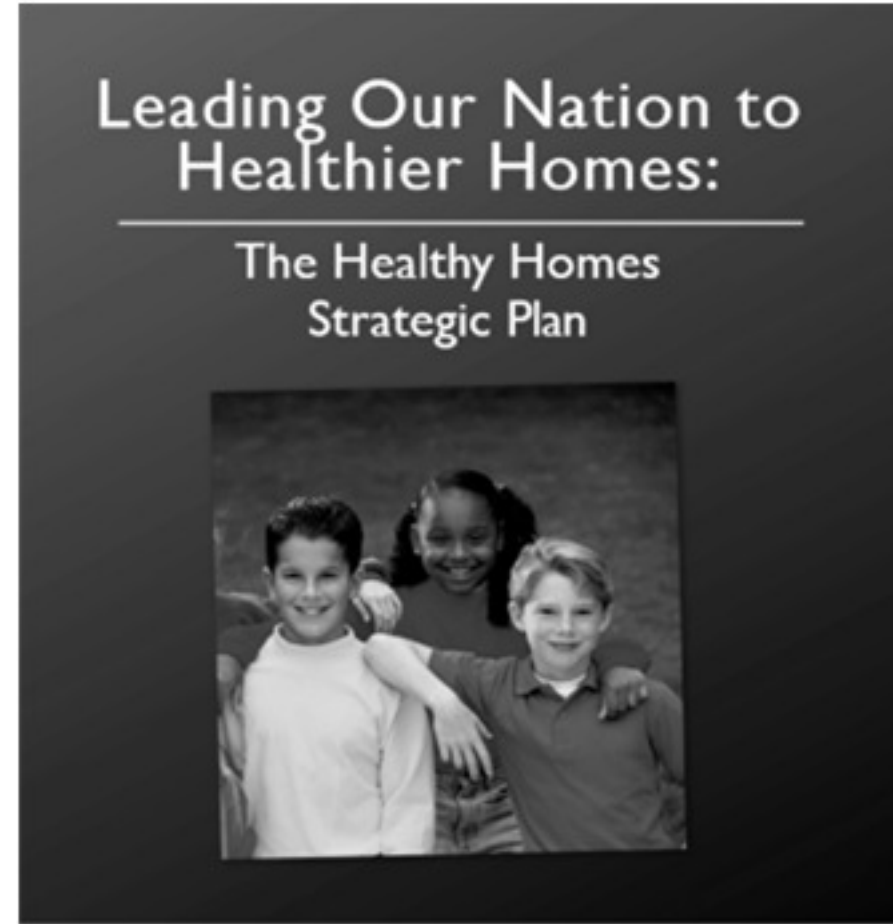


Advancing Healthy Housing

Healthy Home:

- Dry
- Clean
- Pest-free
- Contaminant-free
- Well-ventilated
- Well-maintained
- Appropriately thermally-controlled

- Green technologies, better indoor air quality, energy efficient are part of pathway to achieve a healthy home



U.S. Department of Housing and Urban Development
Office of Healthy Homes and Lead Hazard Control



HEALTHYHOMES
Healthy | Healthy
Partners | Choices

**SAFETY IS EVOLVING,
SO IS UL.**



UL Environment

Enhancing safe living and working environments for people worldwide

FOCUS:

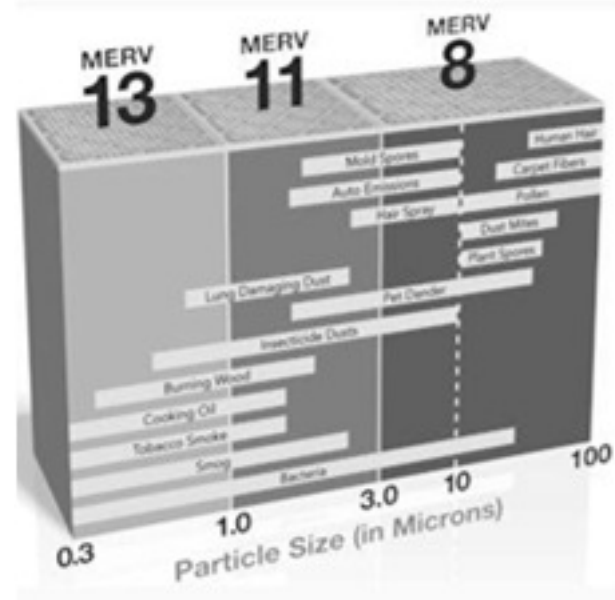
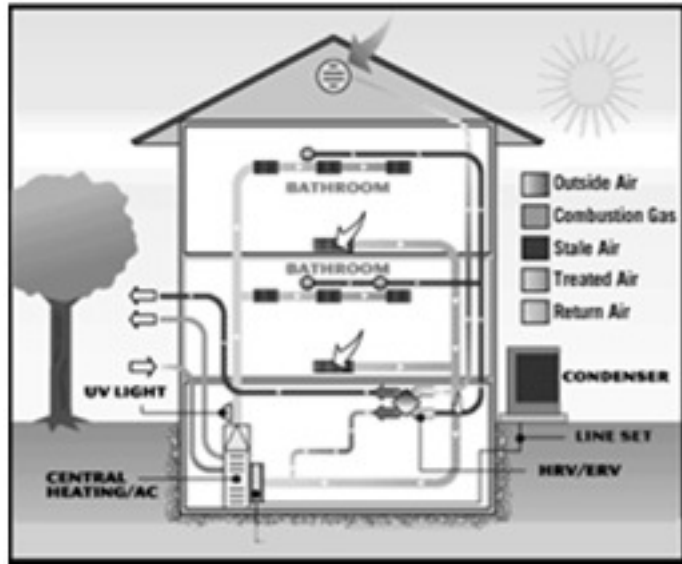
- Chemical Emission Testing and Analytics
- Product and Company Certification and Validation
- Sustainability Services



Air pollutants
are 2-5X
higher inside
than outside



Ventilation, Filtration, Source Control



Source Control?



Questions and Answers

Thank You

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Global Government Affairs Manager



ASSET VALUE

- Studies show a pattern of green buildings being able to more easily attract tenants and to command higher rents and sale prices.
- Local market conditions have a significant impact on the value of green buildings.
- In markets where green is more mainstream, 'brown discounts' are emerging.



OPERATING COSTS

- Green buildings can save money through reduced energy and water consumption and lower long-term operations and maintenance costs.
- Energy savings typically exceed any build cost premiums within a reasonable payback period.



WORKPLACE PRODUCTIVITY AND HEALTH

- Evidence shows that green design attributes can improve occupant productivity, health and well-being.
- Investing in better indoor environments can lead to better returns on one of every company's greatest assets - its employees.



RISK MITIGATION

- Sustainability risk factors can significantly affect rental income and the future value of real estate assets, in turn affecting their ROI
- Changing tenant preferences and investor risk screening may translate into risk of obsolescence for inefficient buildings

