

US EPA ARCHIVE DOCUMENT

Vision 2050

EPA's Green Servicing Workshop
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World Business Council for
Sustainable Development

The new agenda for business





Vision 2050: A holistic, optimistic platform for rethinking business, by business

accenture
High performance. Delivered.

ALCOA

Allianz

ArcelorMittal

BOEING

Duke Energy

e-on

Eskom

EVONIK INDUSTRIES

Fortum

GDF SUEZ

GRUPO NUEVA

GRUPPOFALCK

Holcim

Infosys

大阪ガス

PHILIPS
sense and simplicity

PRICEWATERHOUSECOOPERS

P&G

RioTinto

SONY

storebrand

syngenta

TEPCO

TOYOTA

umicore

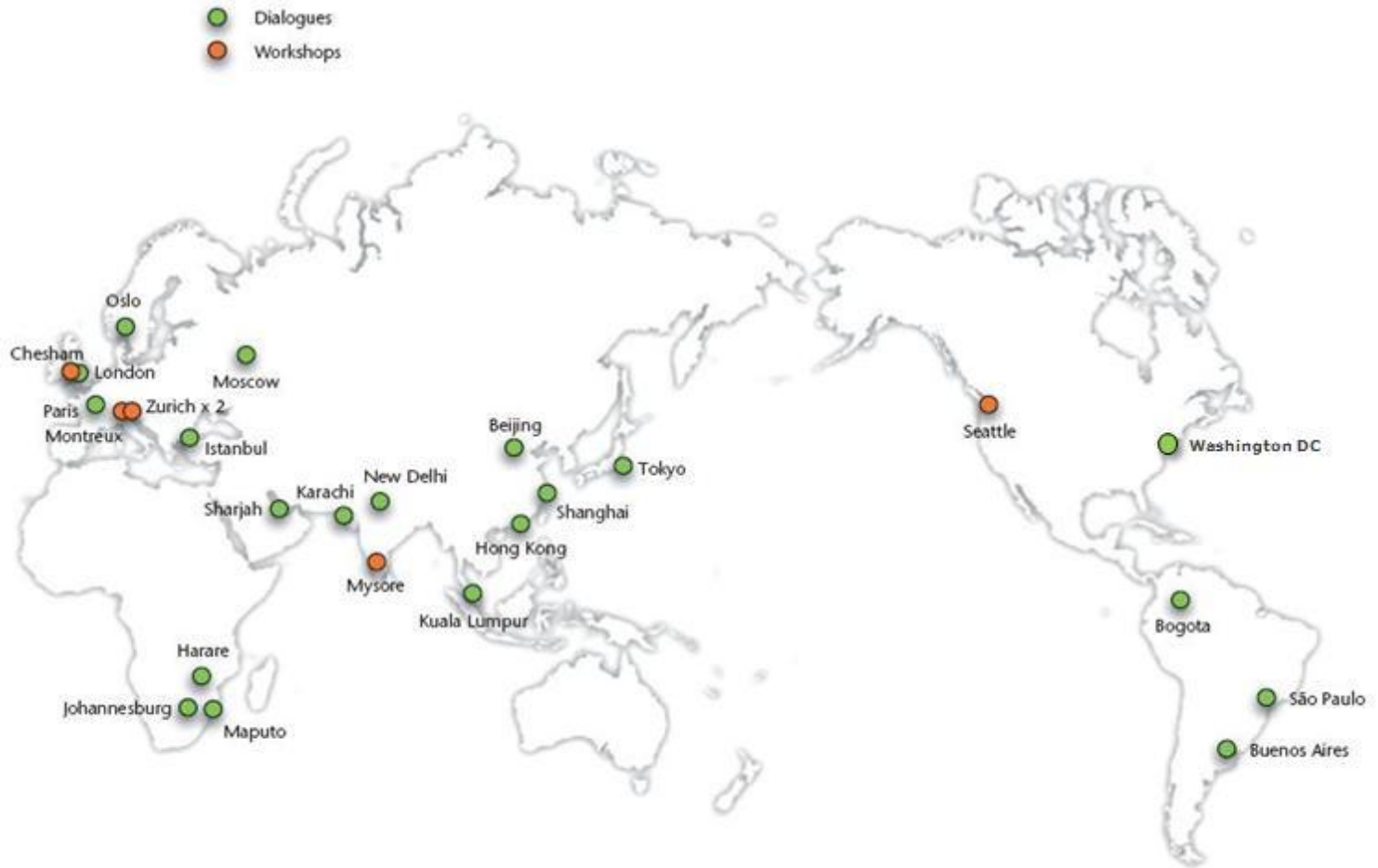
VATTENFALL

VOLKSWAGEN AG

Weyerhaeuser



...through a global business dialogue



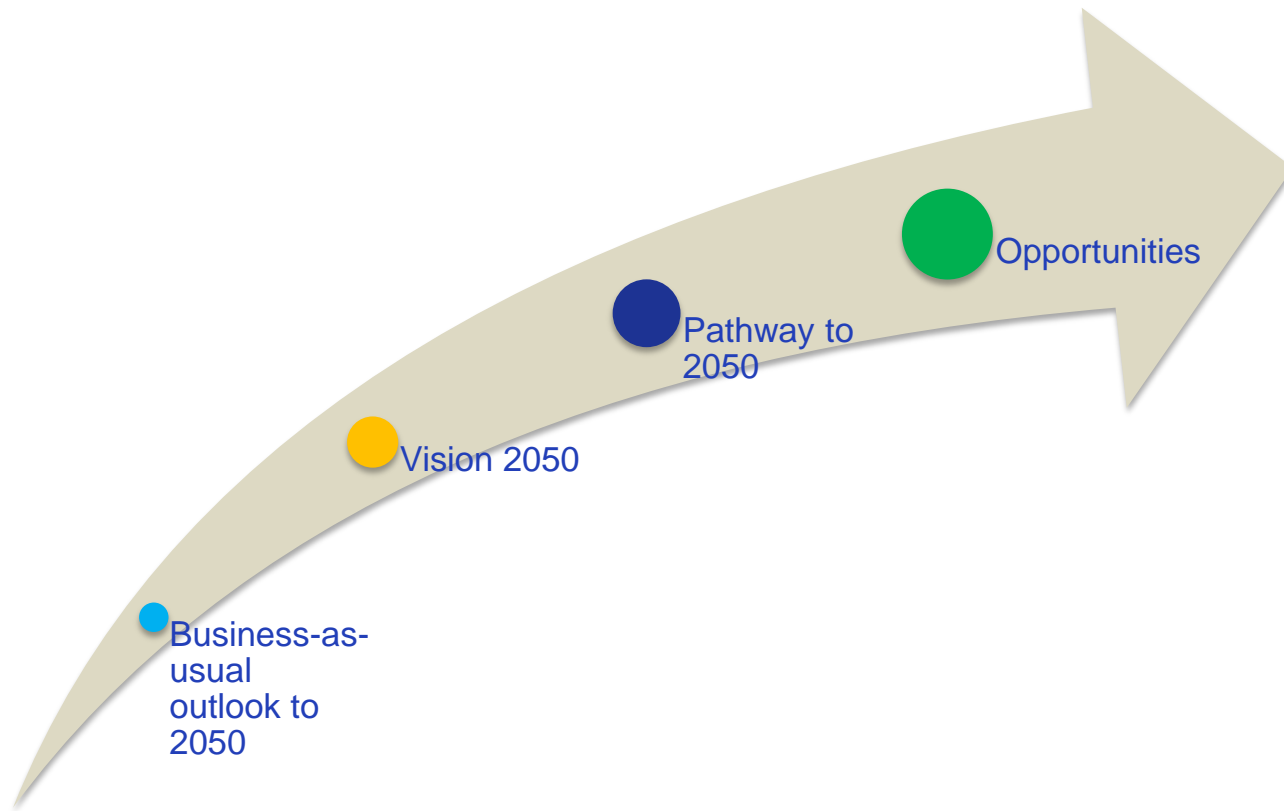


Three key questions

- What does a sustainable world look like?
- How can we realize it?
- What are the roles business can play in ensuring more rapid progress toward that world?



The different steps of *Vision 2050*

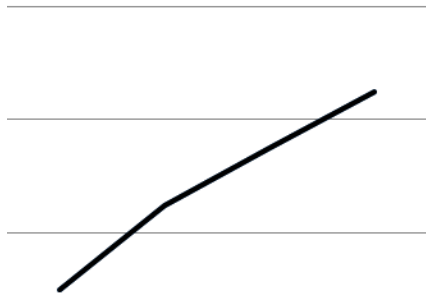


Business-as-usual Outlook to 2050

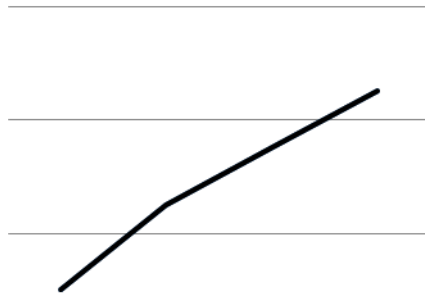




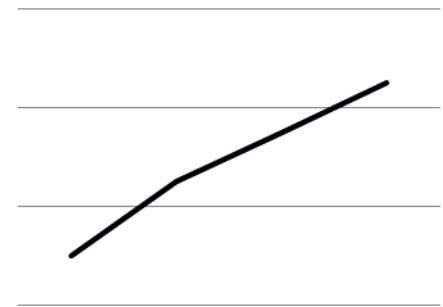
BAU to 2050: Growth, inertia, degradation



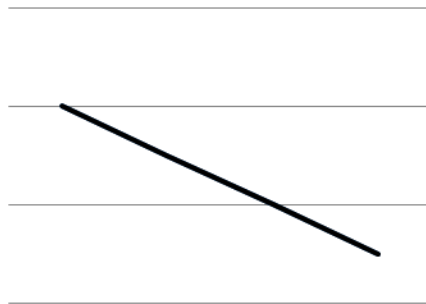
Population



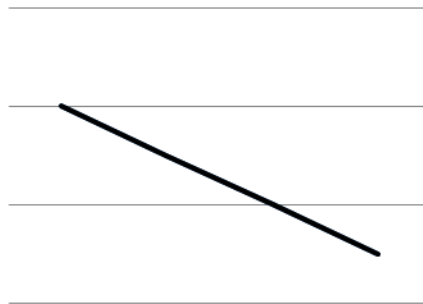
**Energy demand
and emissions**



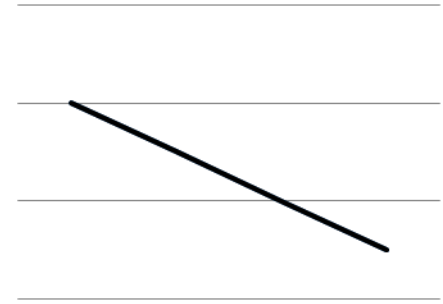
Temperature



Water



Food

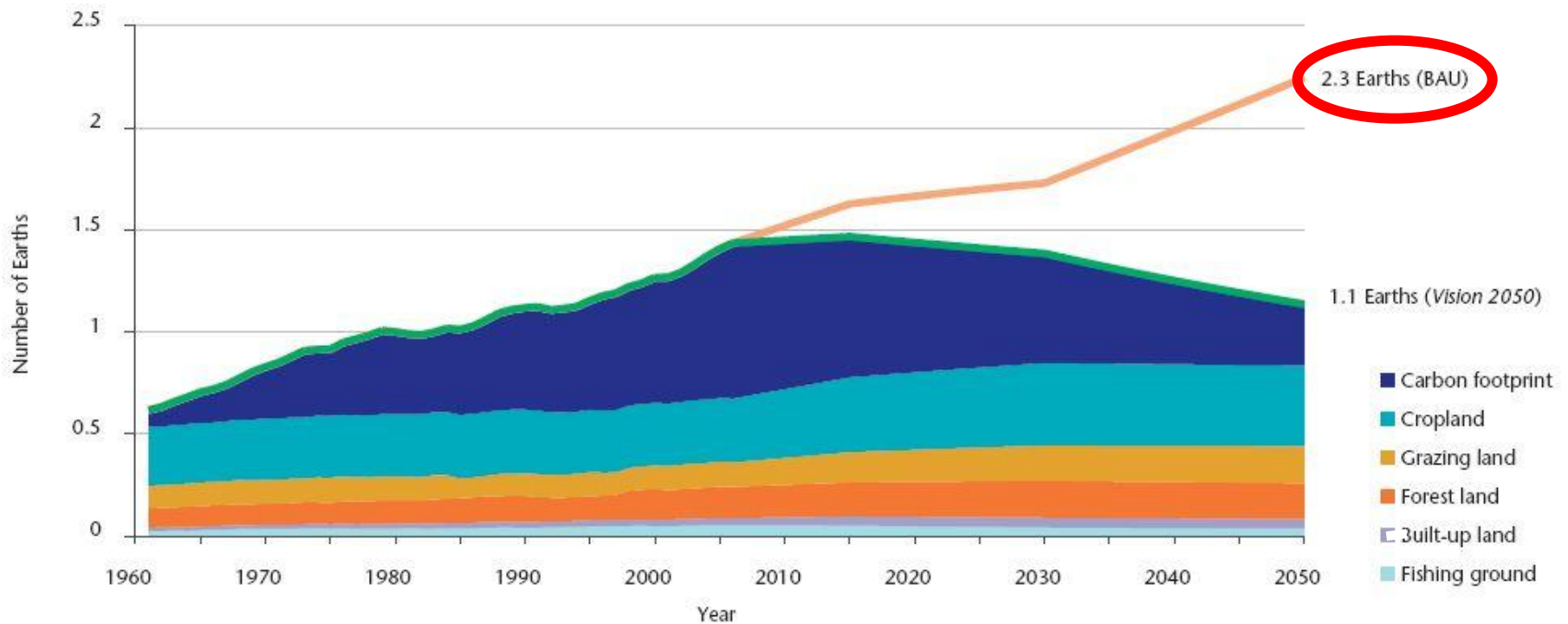


Ecosystems



In sum: World is on an unsustainable track

BAU projection: We will consume 2.3 Earths in 2050



Sources: Global Footprint Network, WBCSD Vision 2050

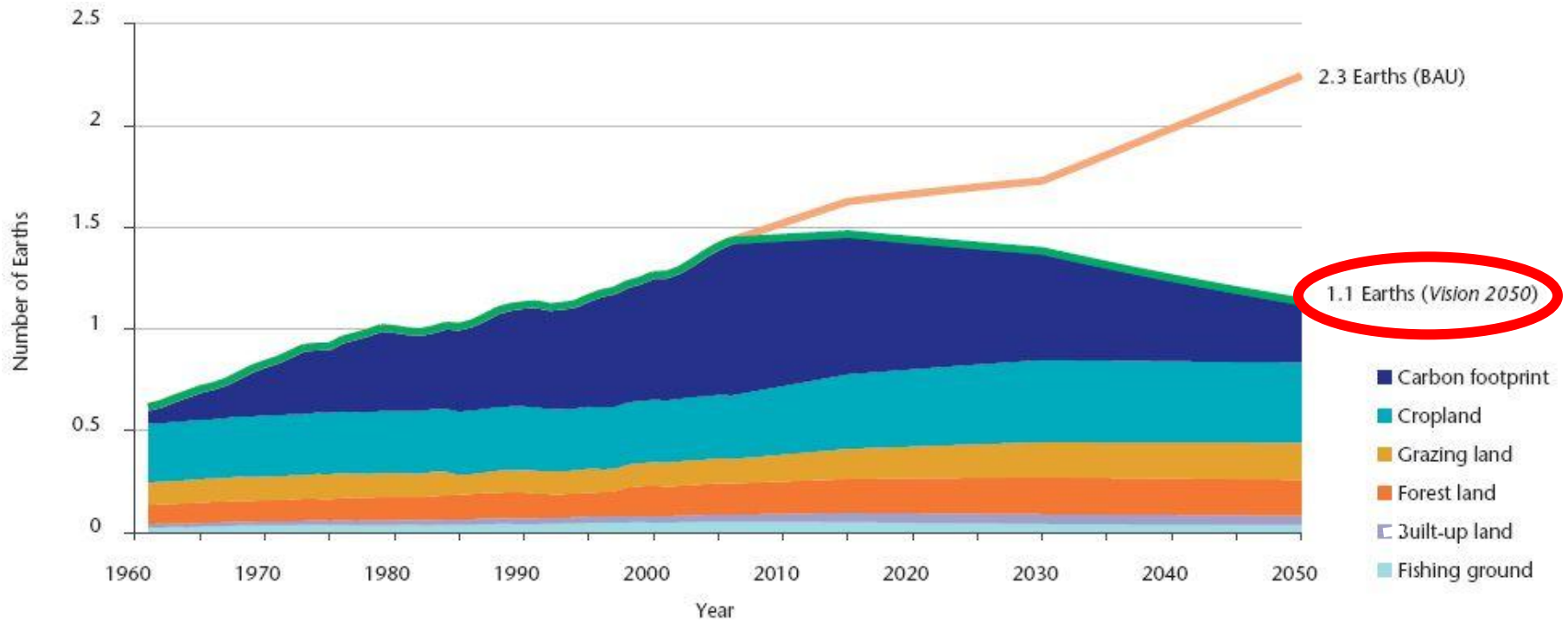
The Vision





Our Vision

Vision 2050: Nine billion people live well, within the limits of the planet

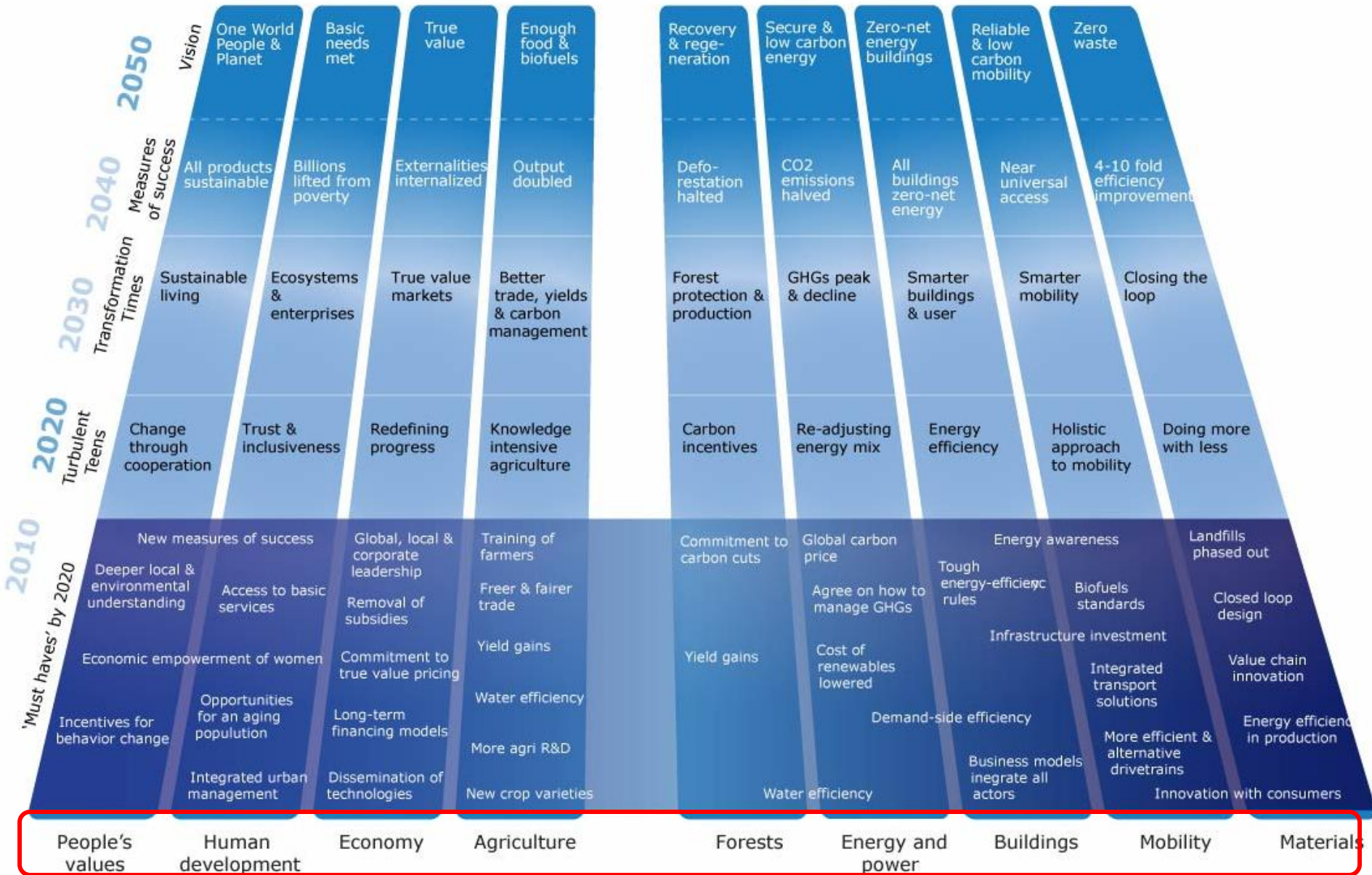


Sources: Global Footprint Network, WBCSD Vision 2050

Pathway to 2050

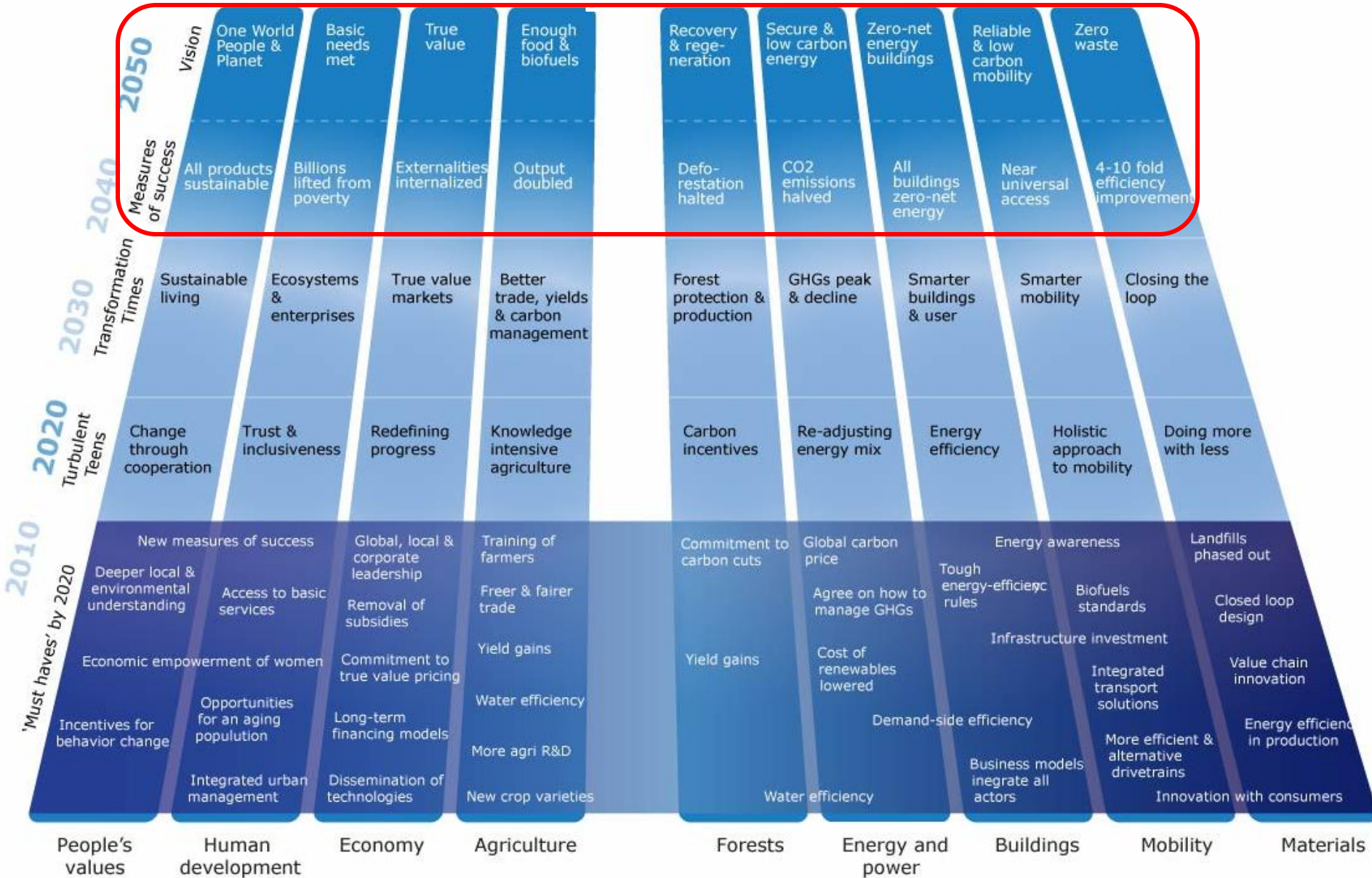


To a sustainable world in 2050



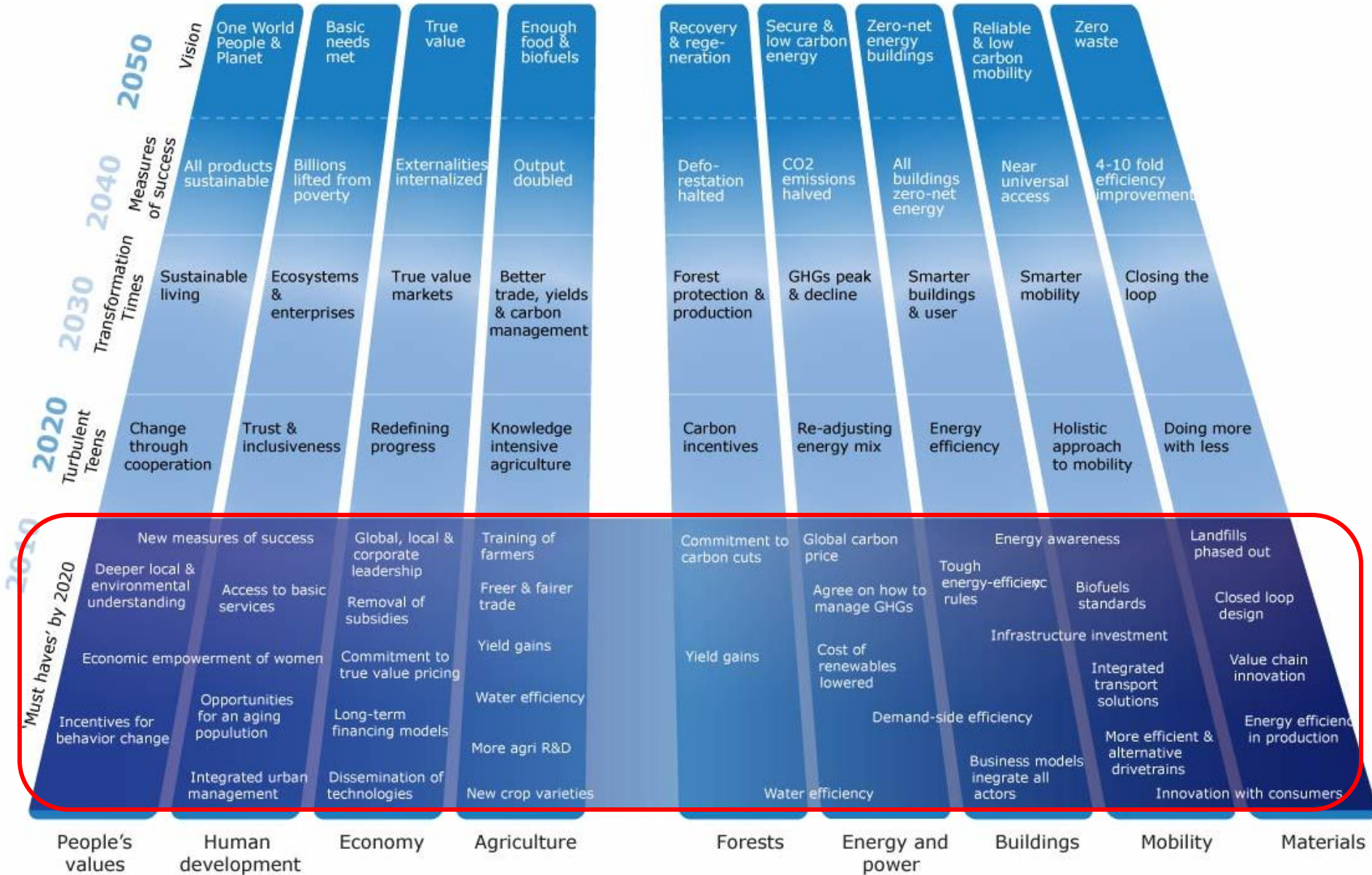
From business-as-usual

To a sustainable world in 2050



From business-as-usual

To a sustainable world in 2050



From business-as-usual



Closing the gap: Reaching the vision

Collaboration

Build complex coalitions, co-innovation

Carbon & resources

Halve CO2 emissions, double agricultural output, 4-10 fold increase in resource efficiency

Consumption

Change consumption patterns to more sustainable lifestyles

Costs

Internalize cost of carbon, water & other ecosystem services



Sustainable innovation is THE key

“...sustainability is now the key driver for innovation. In the future only companies that make sustainability a goal will achieve competitive advantage.”

Harvard Business Review, Sep 2009

Opportunities





Business domains for the next decade – Opportunities and overlaps





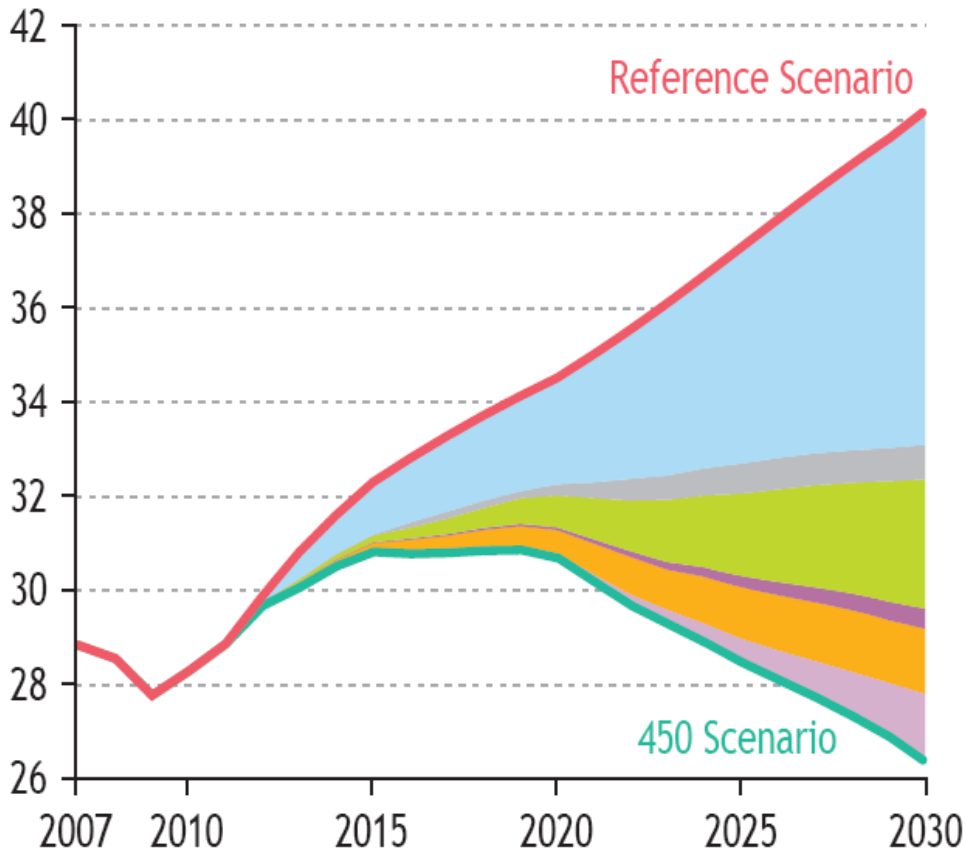
Building & transforming cities: The development of cities presents significant opportunities

Estimates suggest that by **2030**
US\$ 40 trillion will need to be
invested in urban
infrastructure worldwide





Building the new energy mix is another trillion \$ / year business



	Abatement (Mt CO ₂)		Investment (\$2008 billion)	
	2020	2030	2010-2020	2021-2030
Efficiency	2 517	7 880	1 999	5 586
End-use	2 284	7 145	1 933	5 551
Power plants	233	735	66	35
Renewables	680	2 741	527	2 260
Biofuels	57	429	27	378
Nuclear	493	1 380	125	491
CCS	102	1 410	56	646

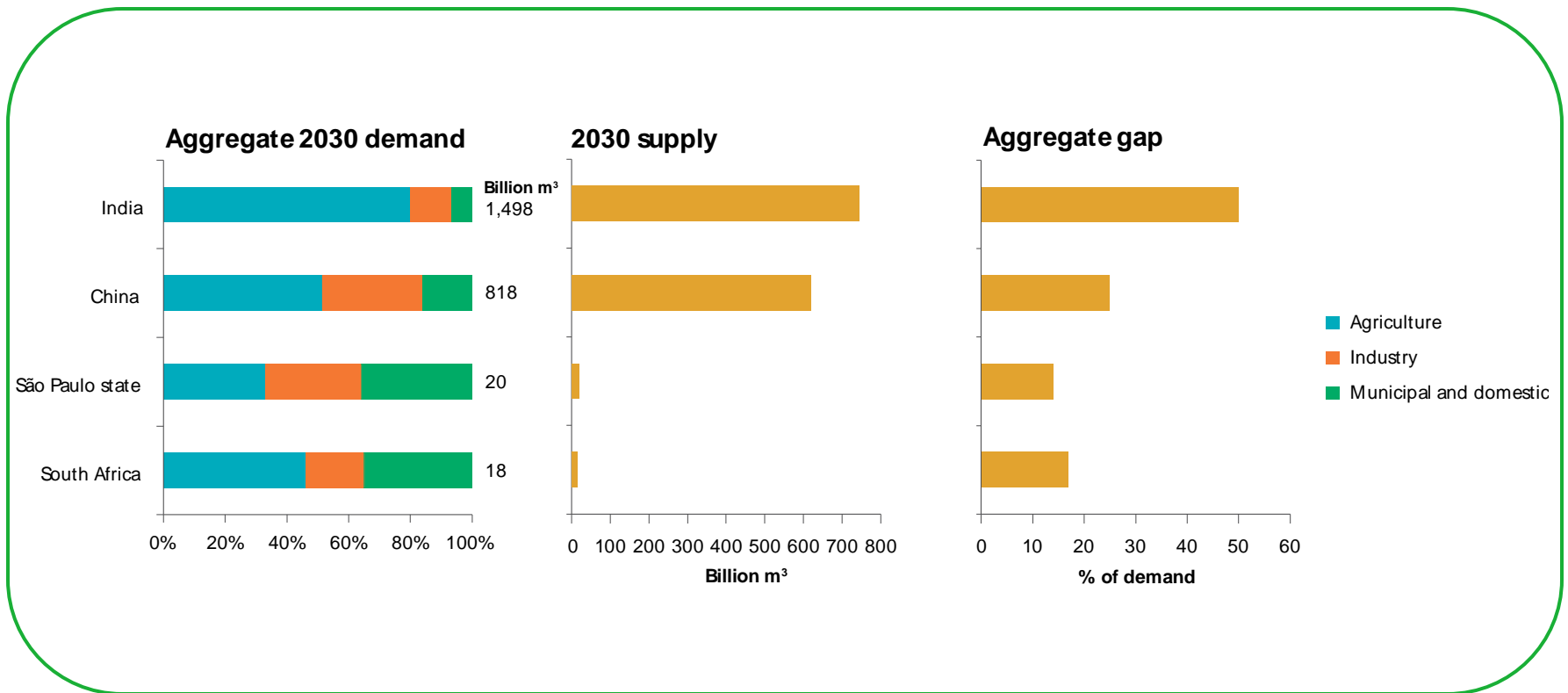
Source: IEA/OECD, 2009



Water infrastructure: A great variety of solutions will be needed

Demand for water will outstrip supply – Action is needed to plug the gap

Base-case demand, supply and corresponding gaps for certain regions

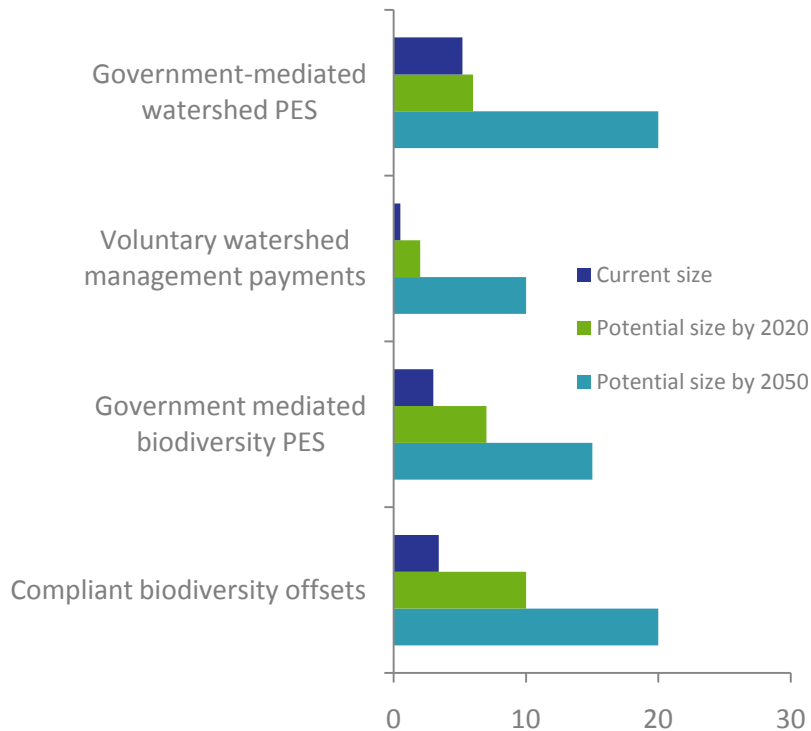


Source: McKinsey/Water Resources Group, *Charting our water future*, 2009



Improving biocapacity and managing ecosystems

Potential growth of some ecosystem markets (US\$ billion)



Source: Forest Trends and the Ecosystem Marketplace, *PES: Market Profiles*, 2008

Ecosystem payments



Technology



Bio-productivity



Distribution



FAW management



Education





Education: Investing in educating women

Providing **girls** with an **extra year**
of **schooling** increases their
wages by **10-20%**





Products and services for aging populations

Each month around 1.9 million people in the world will join the ranks of the over 65s

By 2020 people aged 65 and above will account for about one-fifth of the total global population





Total size of business opportunities is large

Sectors	Annual value in 2050 (US\$ trillion at constant 2008 prices: mid-points with ranges shown in brackets)	% of projected world GDP in 2050
Energy	2.0 (1.0-3.0)	1.0 (0.5-1.5)
Forestry	0.2 (0.1-0.3)	0.1 (0.05-0.15)
Agriculture and food	1.2 (0.6-1.8)	0.6 (0.3-0.9)
Water	0.2 (0.1-0.3)	0.1 (0.05-0.15)
Metals	0.5 (0.2-0.7)	0.2 (0.1-0.3)
Total: Natural resources	4.1 (2.0-6.1)	2.0 (1.0-3.0)
Health and education	2.1 (0.8-3.5)	1.0 (0.5-1.5)
Total	6.2 (2.8-9.6)	3.0 (1.5-4.5)

Source: PwC estimates drawing on data from IEA, OECD and the World Bank

Conclusions





Conclusions

1. There will be tremendous change
2. Global challenges will become the key strategic drivers for business and innovation
3. Opportunities abound for those who turn sustainability into strategy and operations
4. The needed resource efficiency improvements will require “sustainable innovation by all means”
5. The Green Race is on!