

dynamic cities project

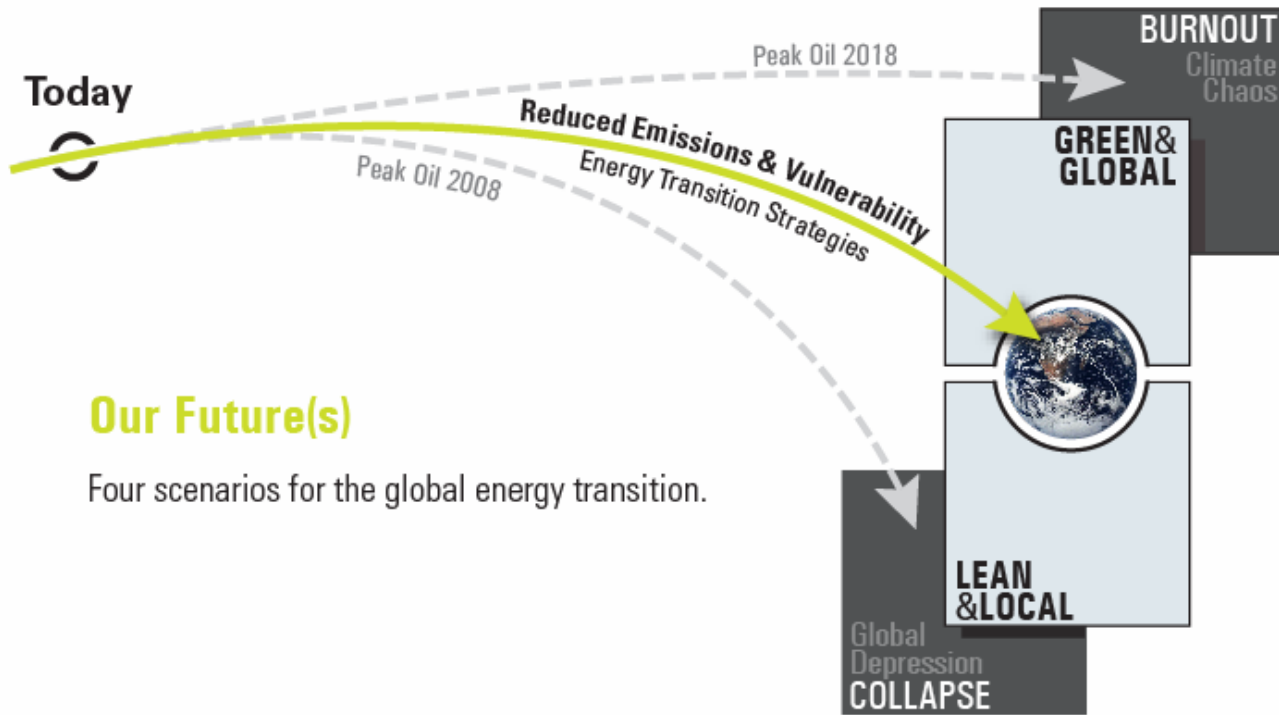
design
planning
policy for a
changing world



Energy Transition and the Dynamic City targets and timelines for global leaders

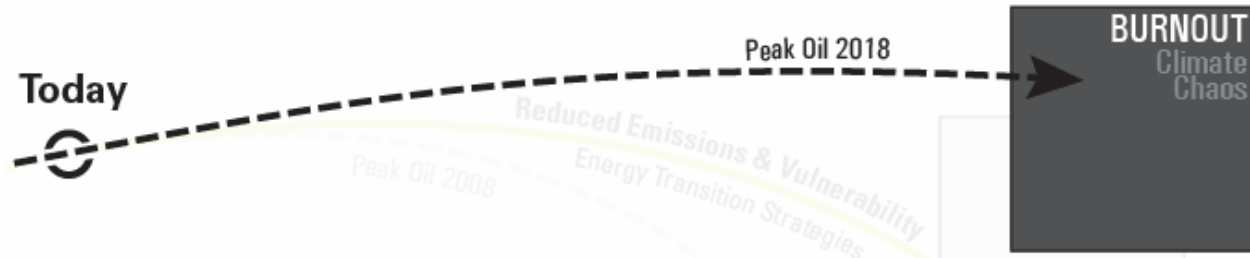
v.1 May 23, 2007

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Executive Director



Our Future(s)

Four scenarios for the global energy transition.



BURNOUT

Business as Usual Leading to Climate Chaos

Non-conventional fossil fuels offset depletion masking any overall 'peak' until 2018.

The price of oil hovers above \$70/bbl for several decades and drives a transition to coal, nuclear, and unsustainably sourced biomass.

CO2 emissions skyrocket, while habitats, farmland, and forests are decimated in a rush for wood and biomass.

Super storms, rising sea levels, and desertification cause massive refugee, food, and health crises.

Today



GREEN&GLOBAL

A Proactive Transition led by Technology and Markets

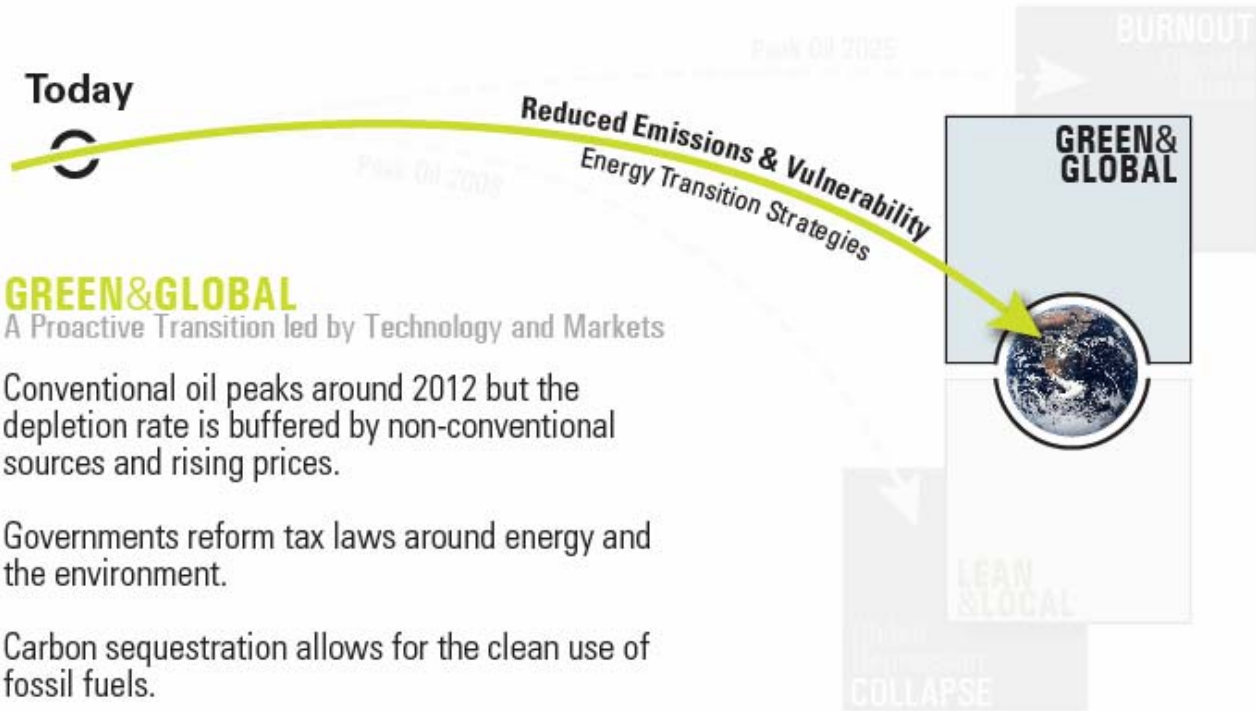
Conventional oil peaks around 2012 but the depletion rate is buffered by non-conventional sources and rising prices.

Governments reform tax laws around energy and the environment.

Carbon sequestration allows for the clean use of fossil fuels.

The 'Green' sector shows tremendous growth, while older industries decay.

Developing third-world economies 'leap-frog' to sustainable economies.



Today



LEAN&LOCAL

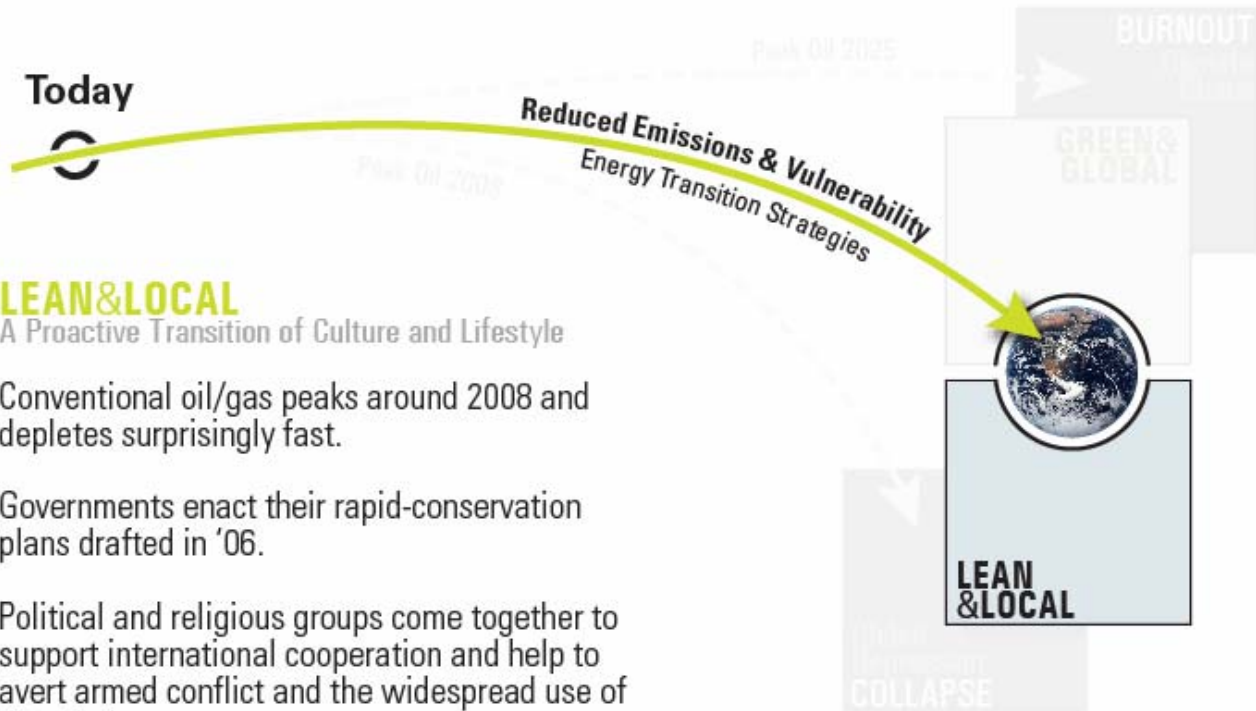
A Proactive Transition of Culture and Lifestyle

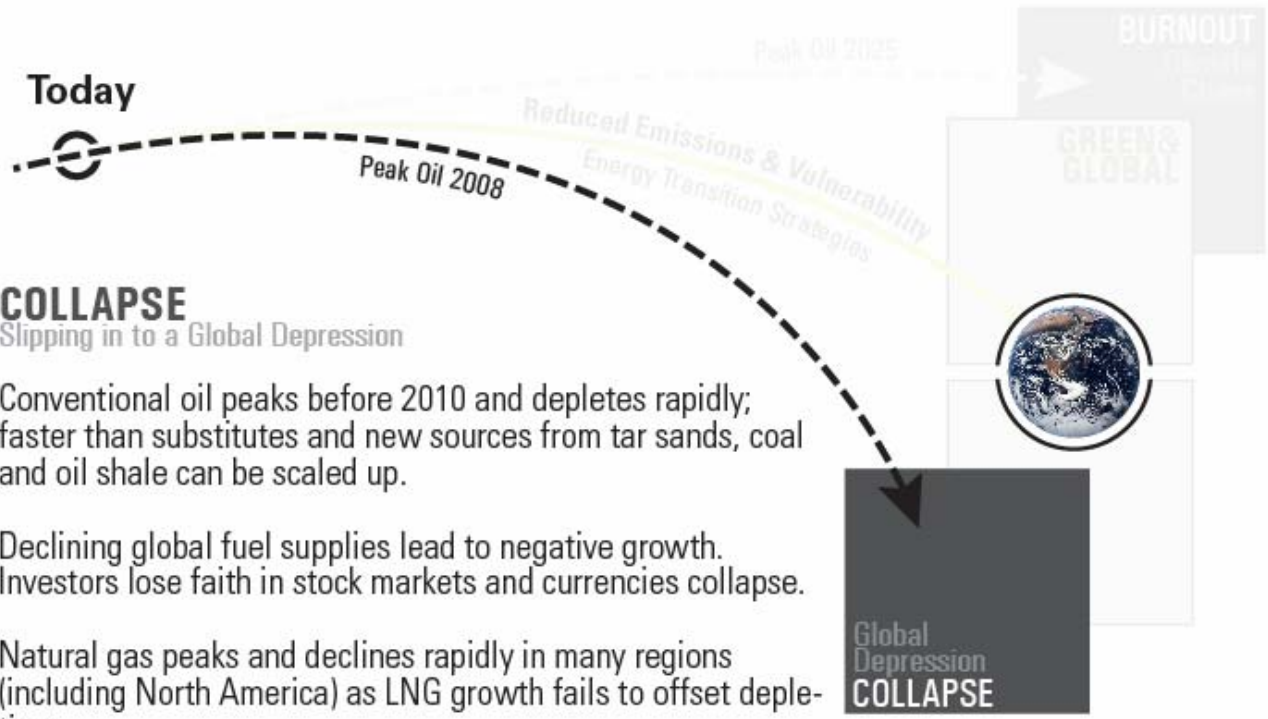
Conventional oil/gas peaks around 2008 and depletes surprisingly fast.

Governments enact their rapid-conservation plans drafted in '06.

Political and religious groups come together to support international cooperation and help to avert armed conflict and the widespread use of dirty fuels.

The global economy transitions (with the help of a few price and supply shocks) from a global-centric to a regional and local-centric model.





COLLAPSE
Slipping in to a Global Depression

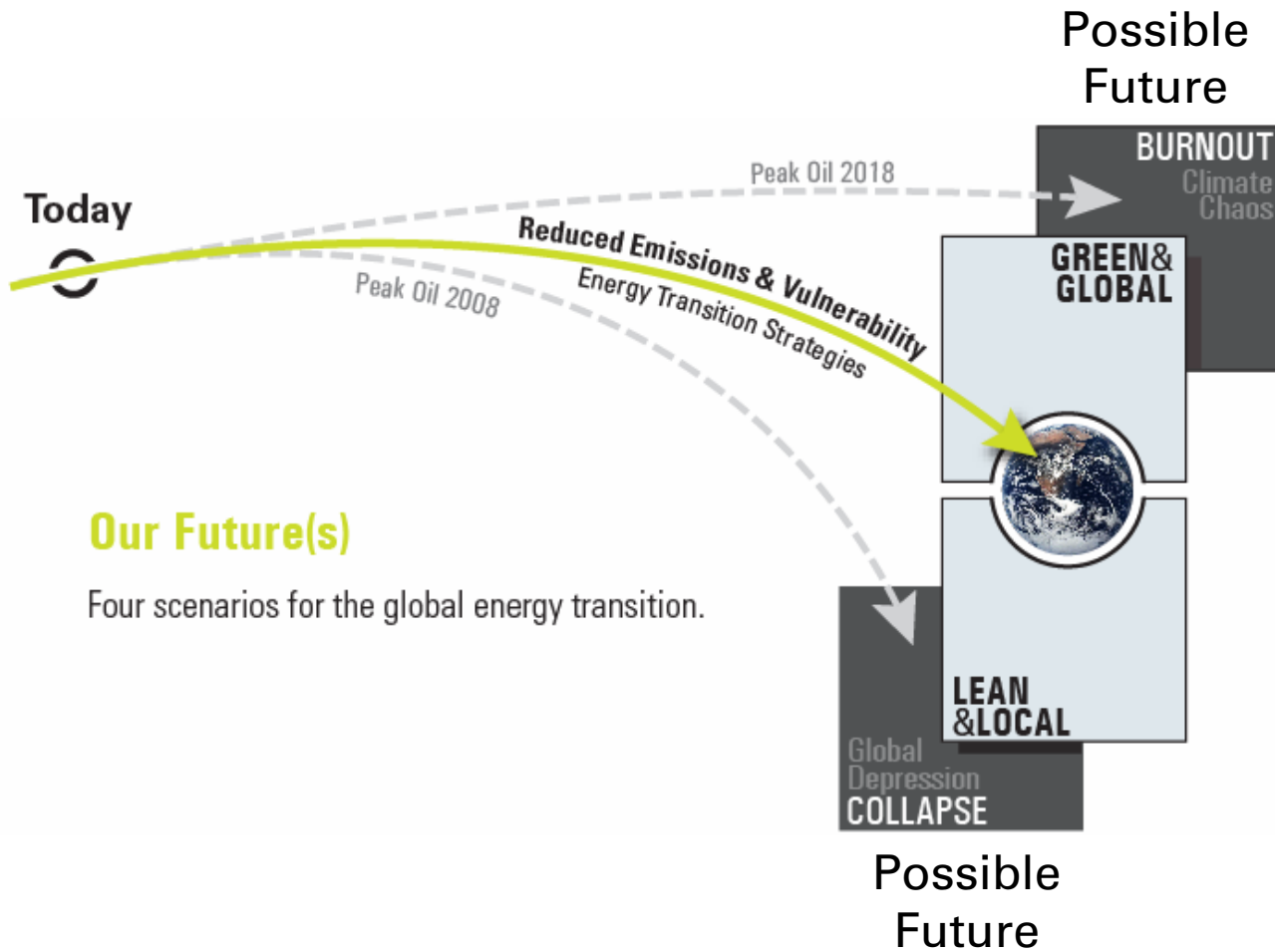
Conventional oil peaks before 2010 and depletes rapidly; faster than substitutes and new sources from tar sands, coal and oil shale can be scaled up.

Declining global fuel supplies lead to negative growth. Investors lose faith in stock markets and currencies collapse.

Natural gas peaks and declines rapidly in many regions (including North America) as LNG growth fails to offset depletion.

Nations battle for resources abroad and fight unrest at home. Unemployment soars, global travel and the globalized economy collapse.

Health and food crises are rampant. Populations contract from lower birth rates and lower life expectancies.

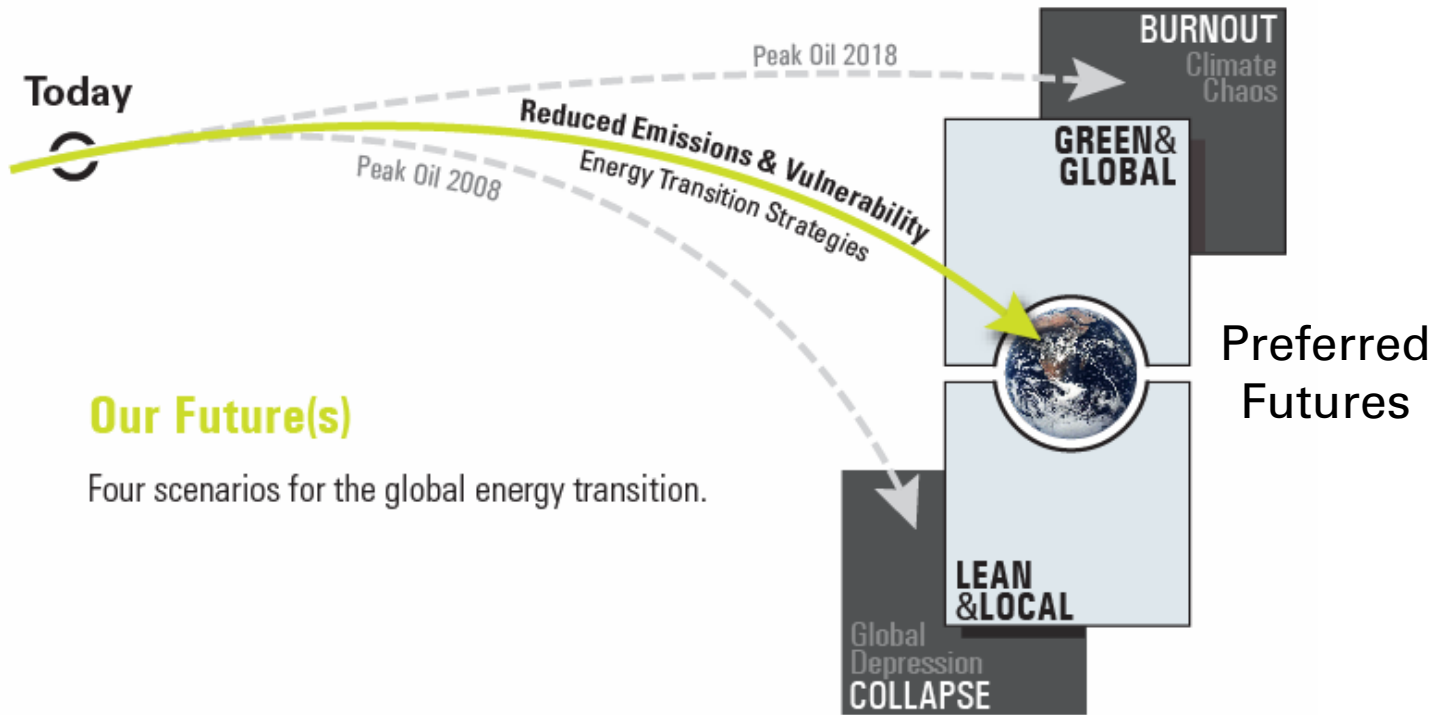


Our Future(s)

Four scenarios for the global energy transition.

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Four scenarios for the global energy transition.

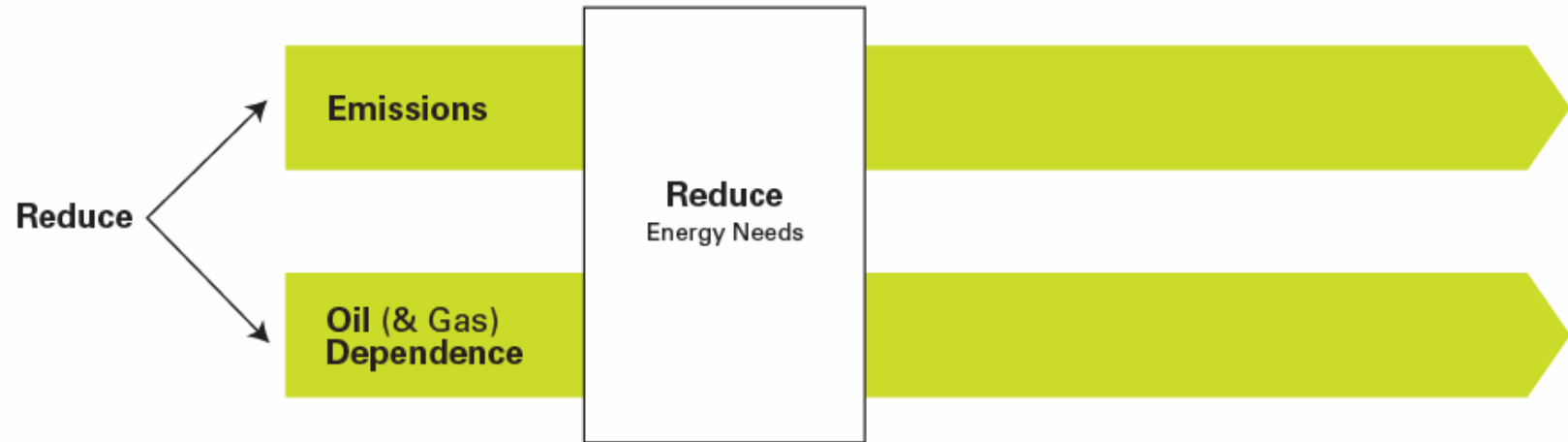
Creating an Energy Transition Strategy

Energy Transition Strategies



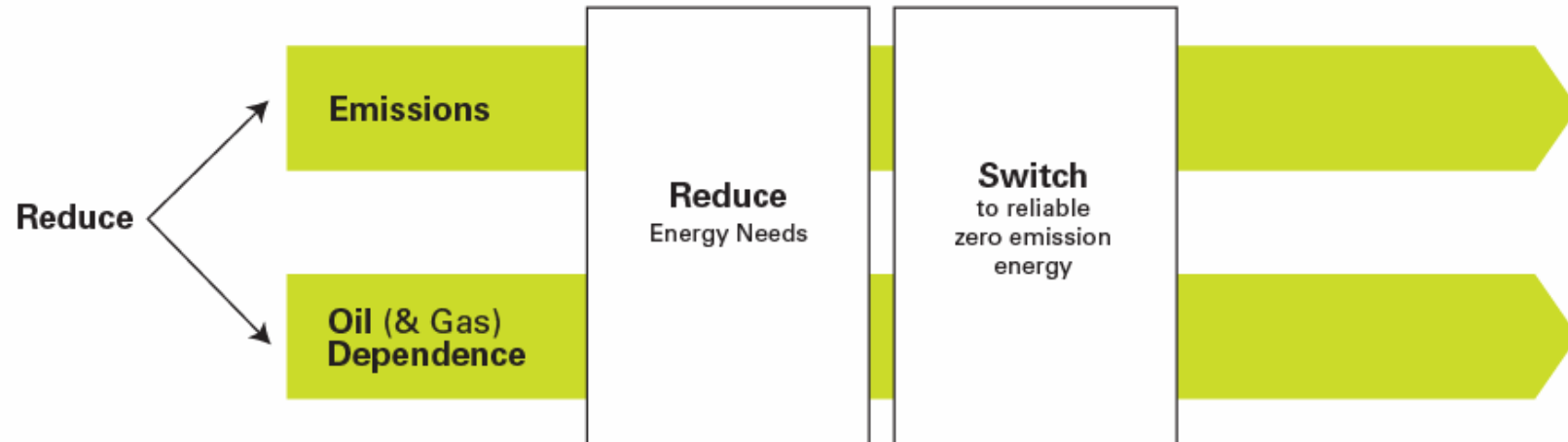
Creating an Energy Transition Strategy

Energy Transition Strategies



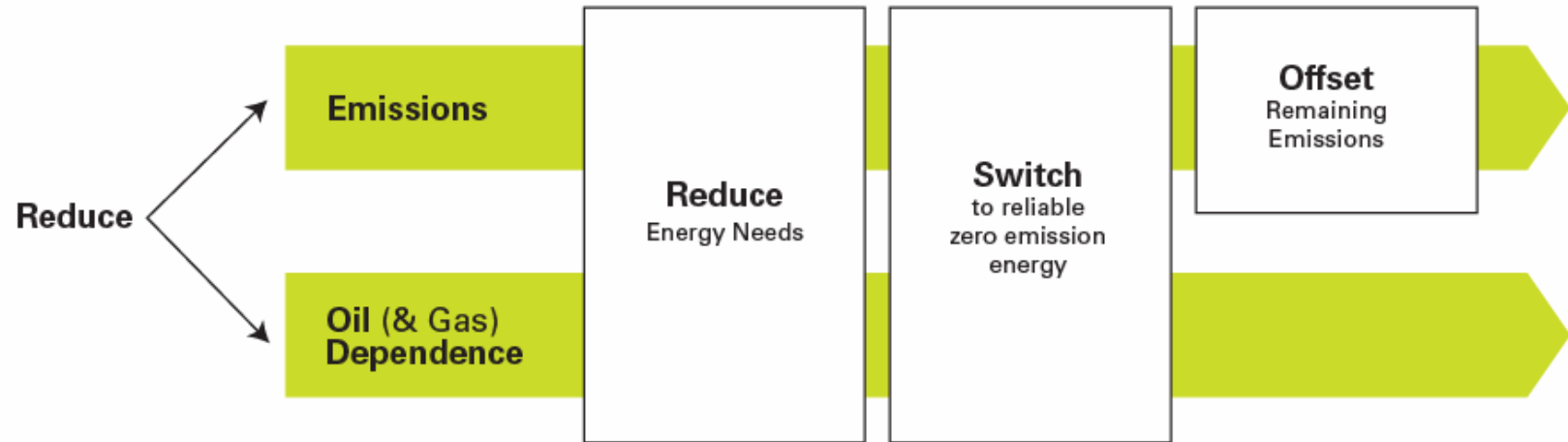
Creating an Energy Transition Strategy

Energy Transition Strategies



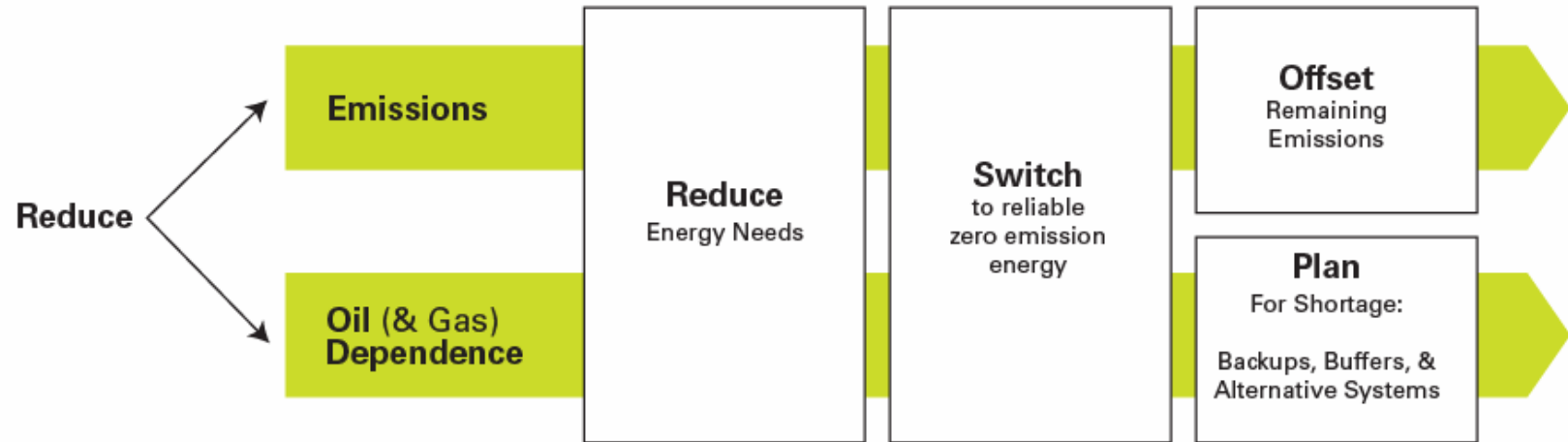
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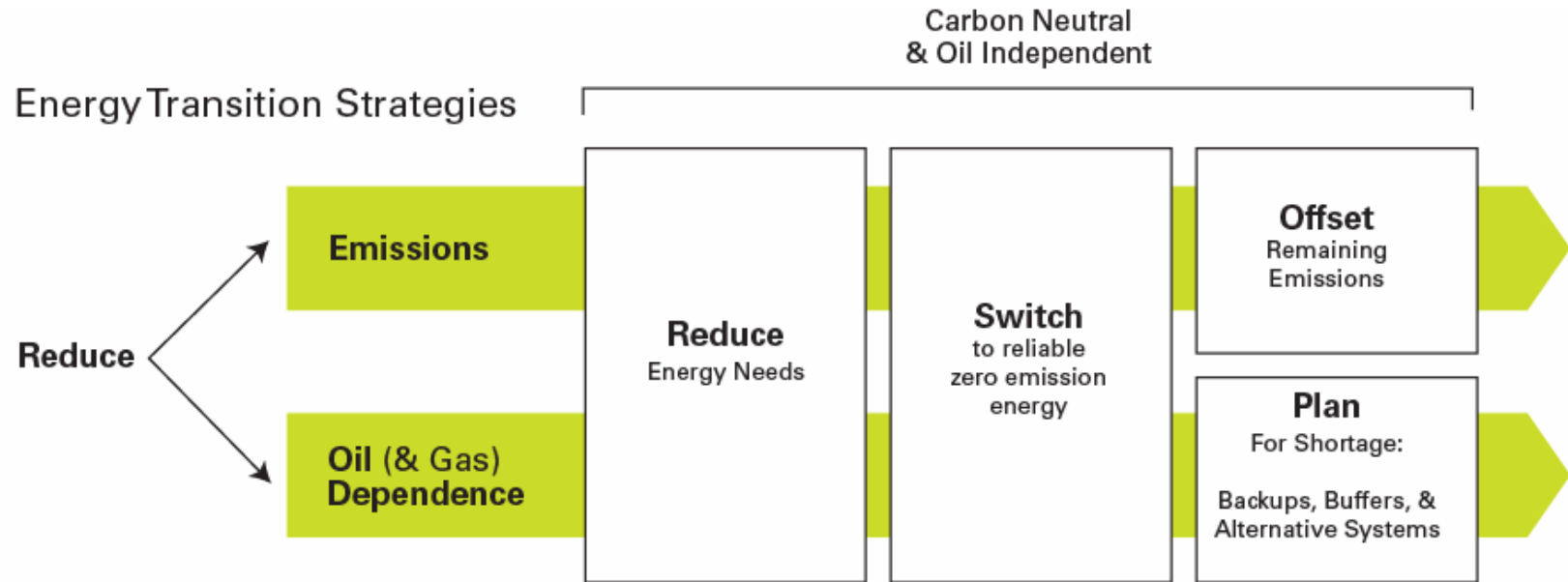


Creating an Energy Transition Strategy

Energy Transition Strategies

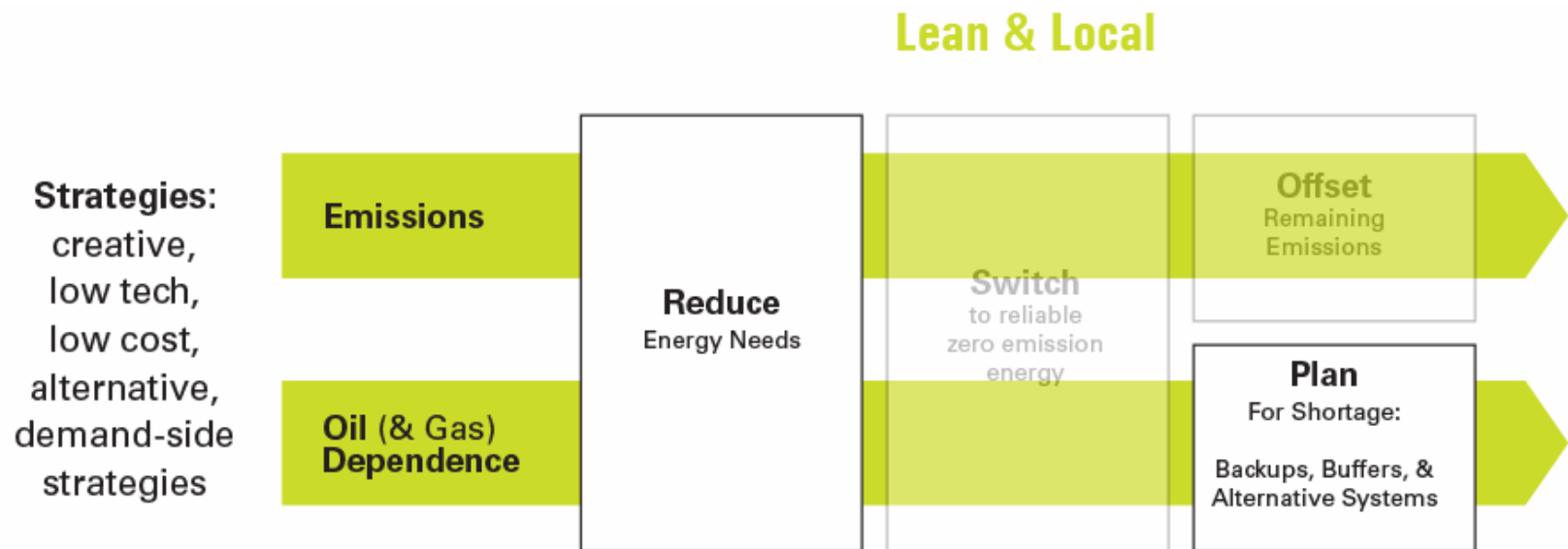


Creating an Energy Transition Strategy



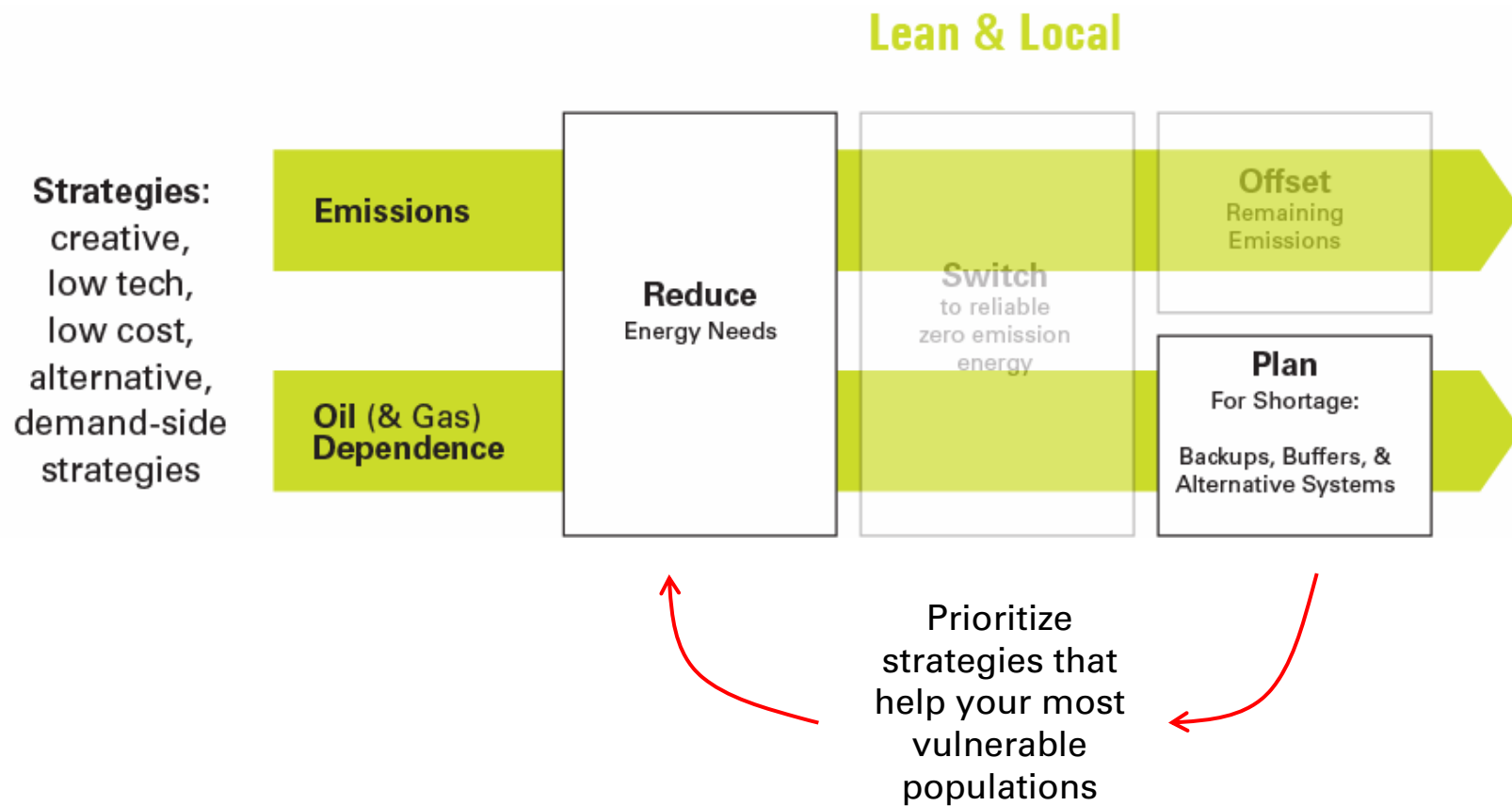
Energy Transition Strategies

> *Lean & Local Strategies*



Energy Transition Strategies

> *Lean & Local* Priorities



Lean & Local

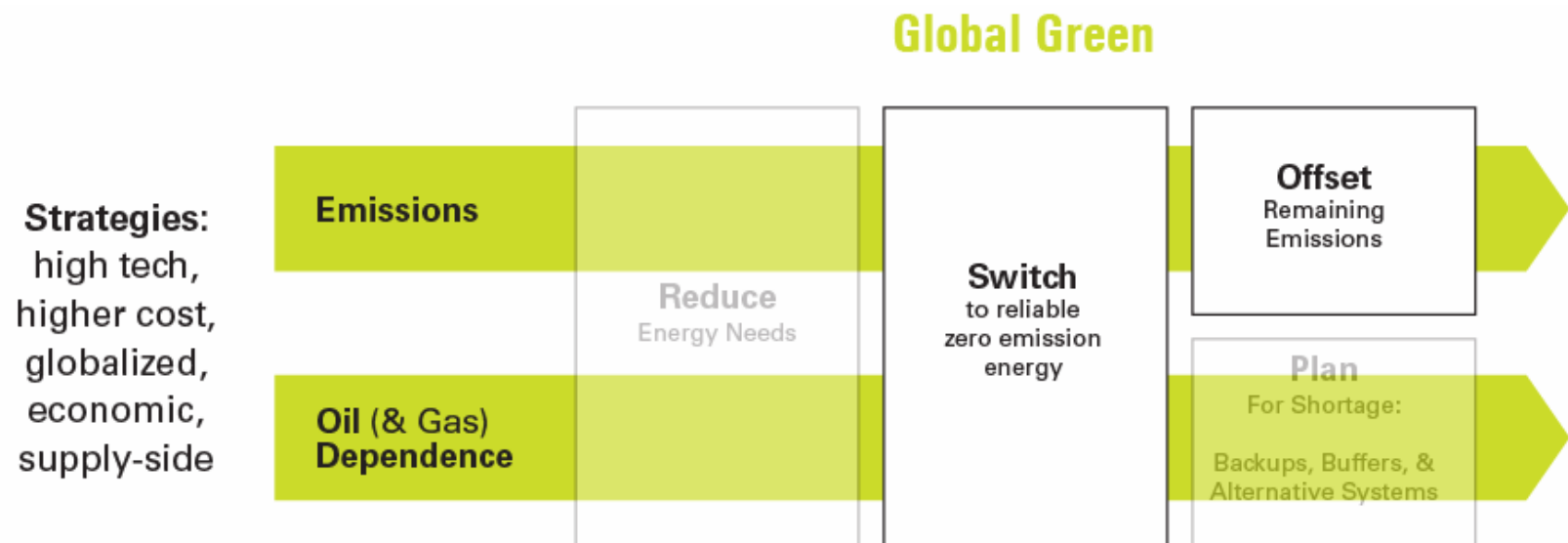
Strategies:
creative,
low tech,
low cost,
alternative,
demand-side
strategies



Prioritize
strategies that
help your most
vulnerable
populations

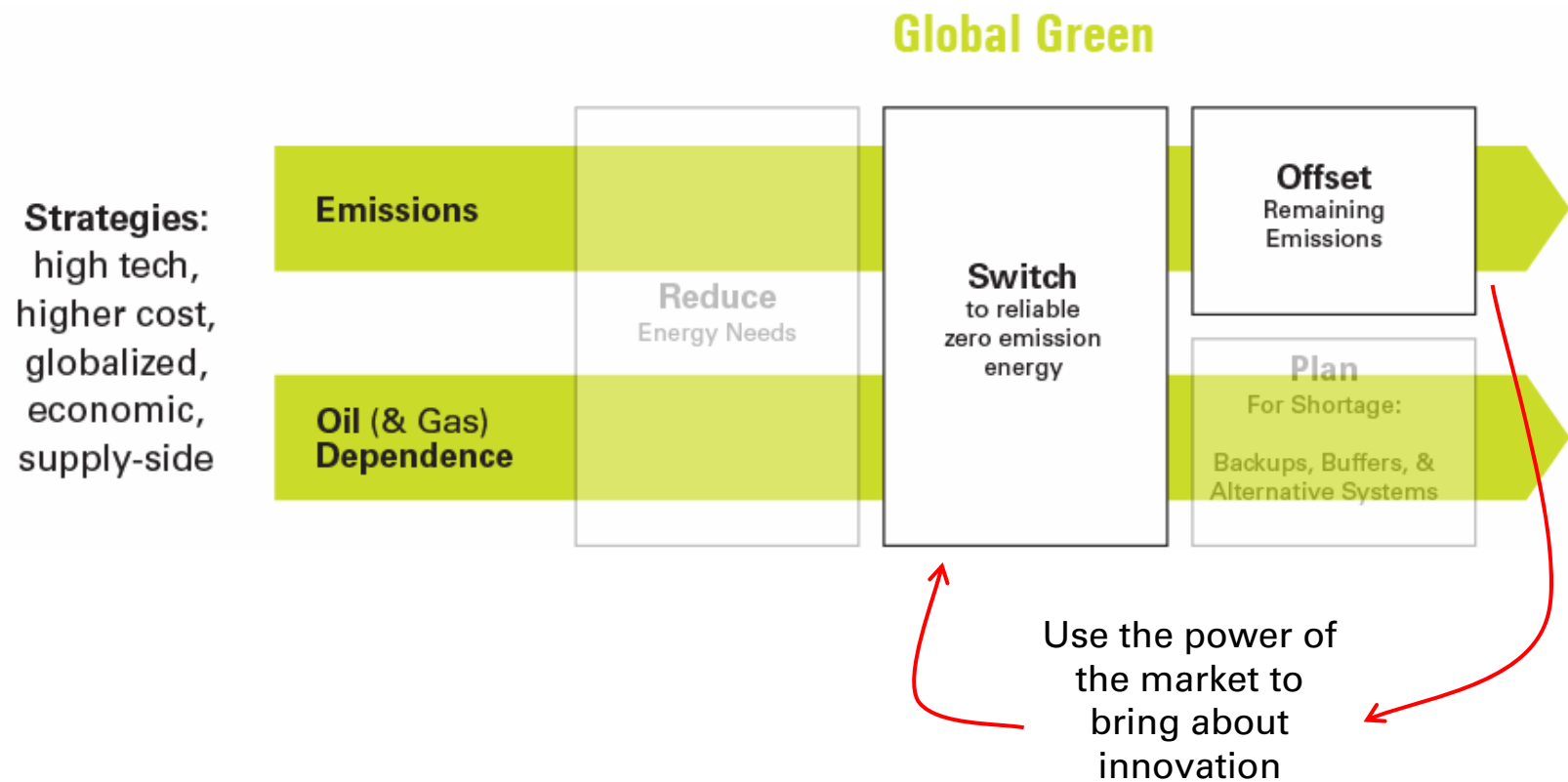
Energy Transition Strategies

> *Global Green Priorities*

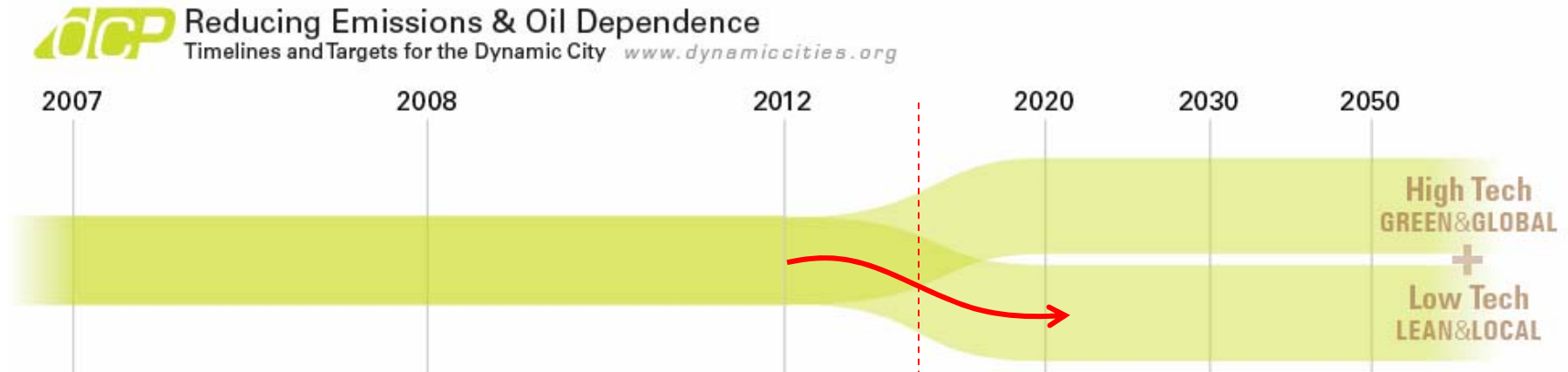


Energy Transition Strategies

> *Global Green Strategies*



Energy Transition Strategies

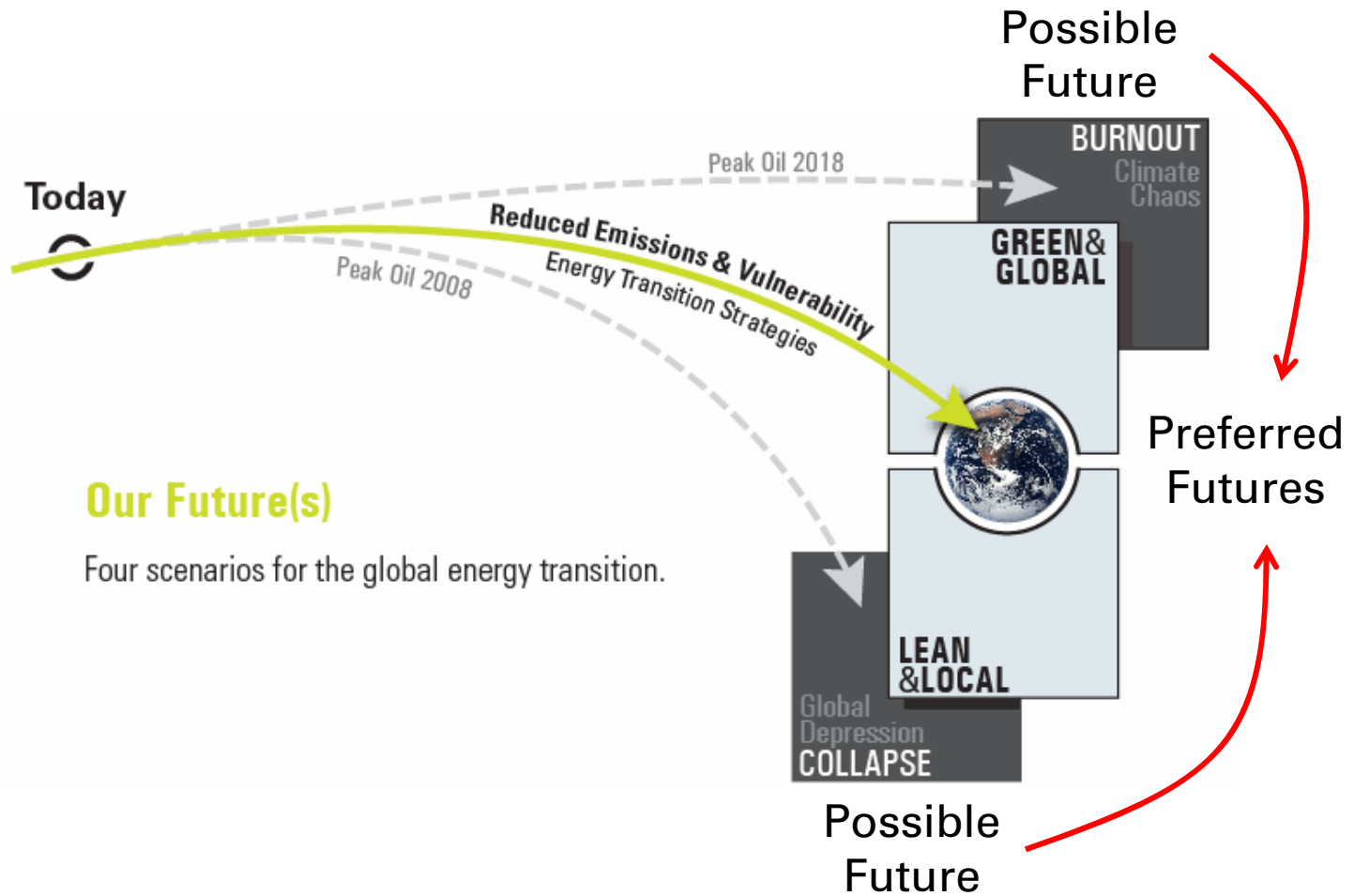


After 2015:

Resource Constrained Future

If oil peaks earlier, or declines quickly, then we'll
prioritize Lean & Local solutions

What separates the preferred from the possible?

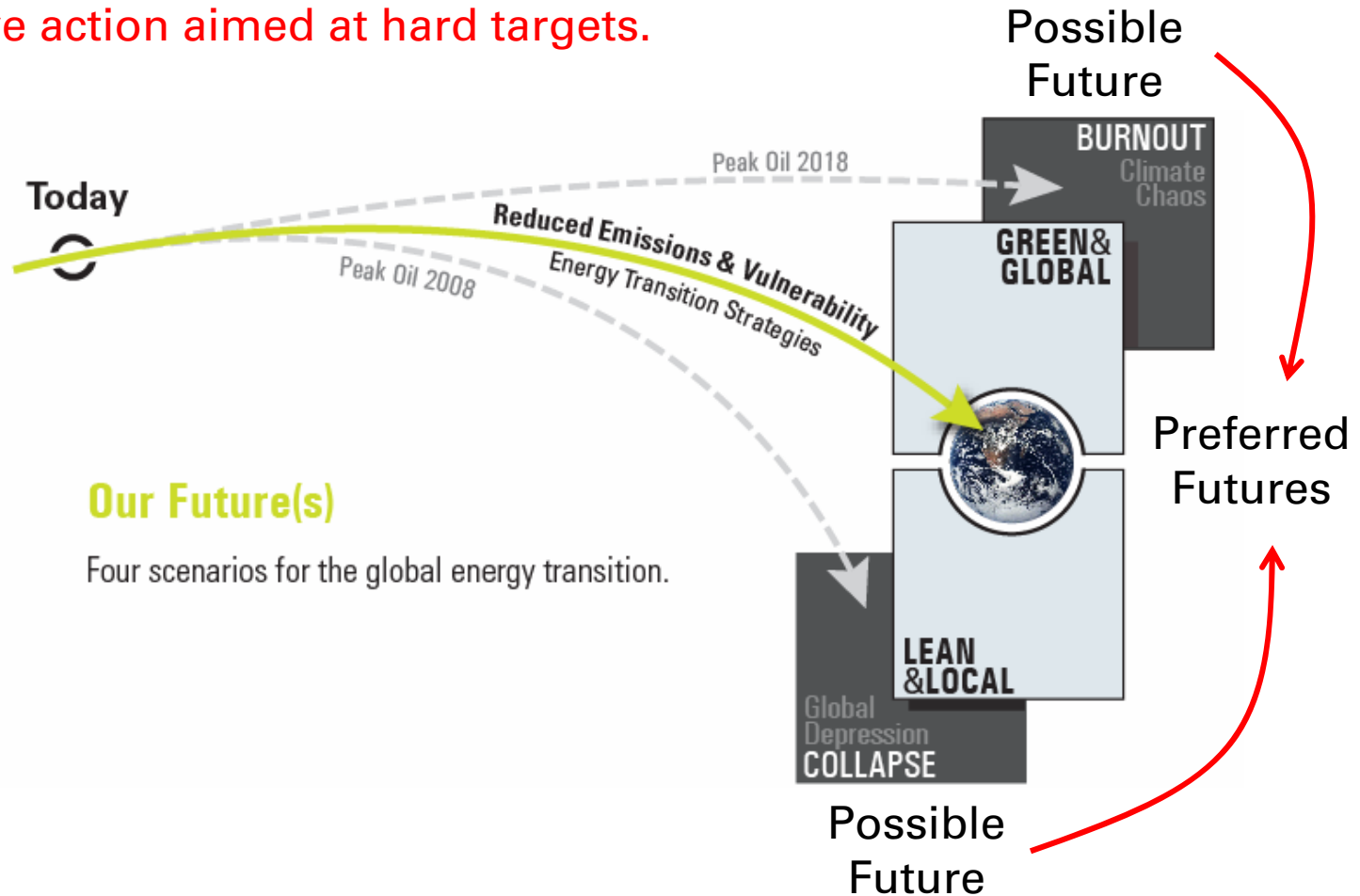


Our Future(s)

Four scenarios for the global energy transition.

What separates the preferred from the possible?

> Proactive action aimed at hard targets.



What separates the preferred from the possible?

> Proactive action aimed at hard targets.

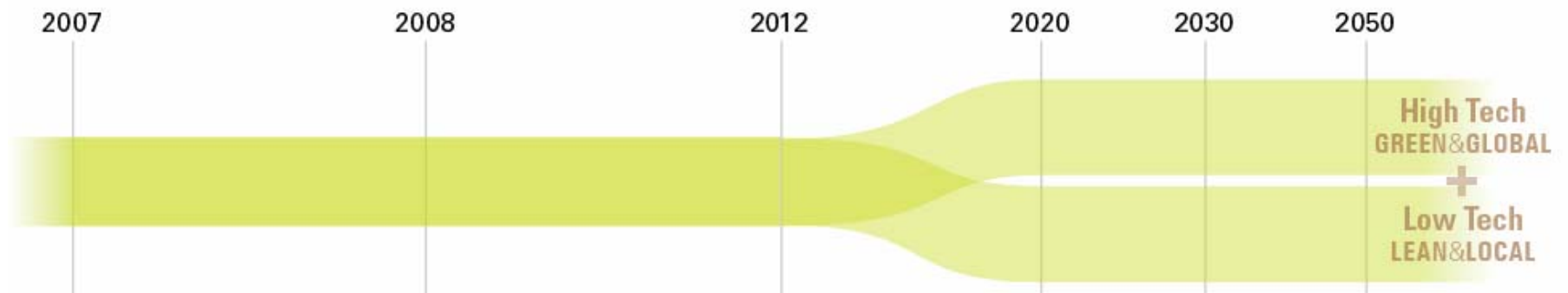
“You need the tension of a very challenging goal. Inspirational goals call an organization to act beyond conventional boundaries... an easy goal fails to challenge the creative potential of the organization.”

Energy Transition Targets

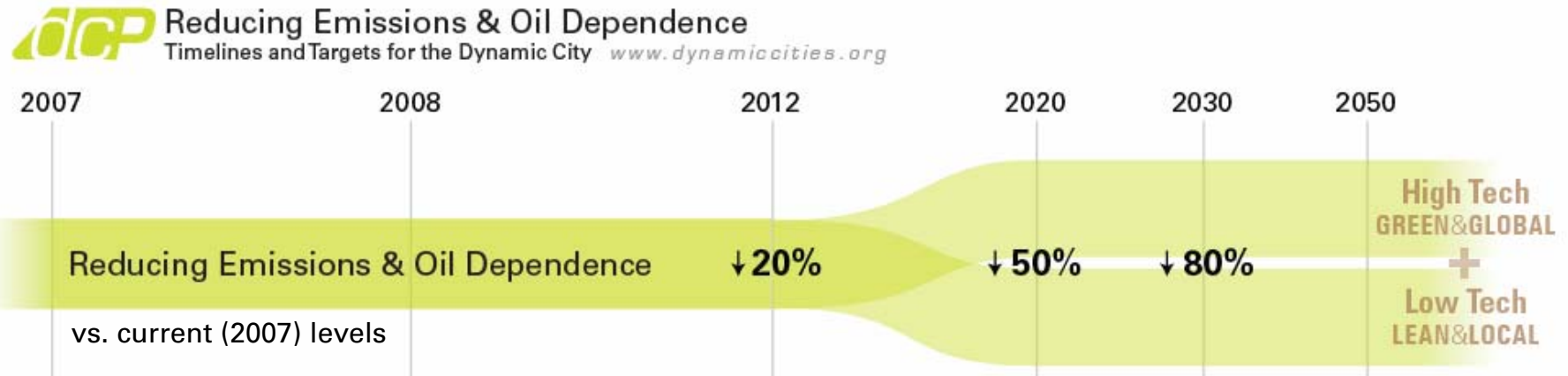


Reducing Emissions & Oil Dependence

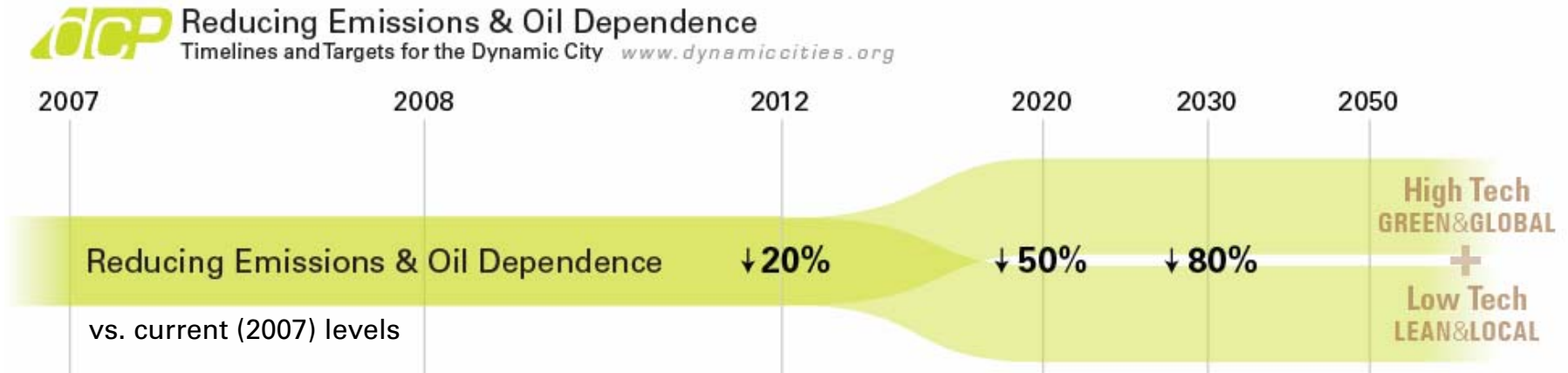
Timelines and Targets for the Dynamic City www.dynamiccities.org



Energy Transition Targets

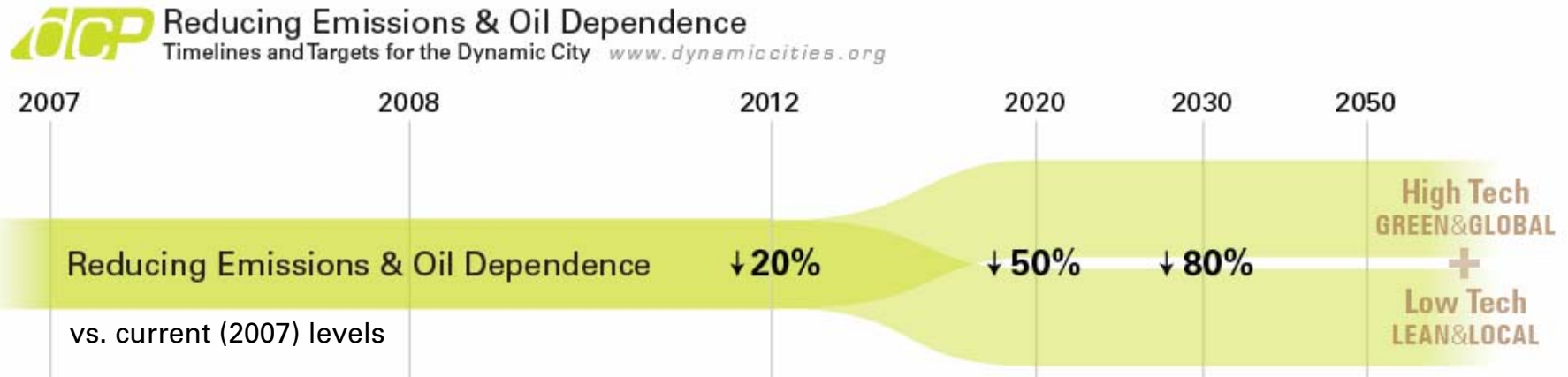


Energy Transition Targets

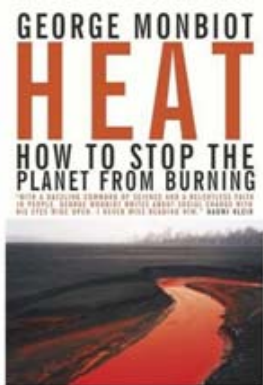


These targets synthesize leading goals from around the world.

Energy Transition Targets



These targets synthesize leading goals from around the world.



2030 °Challenge



the City of Portland
Peak Oil Task Force

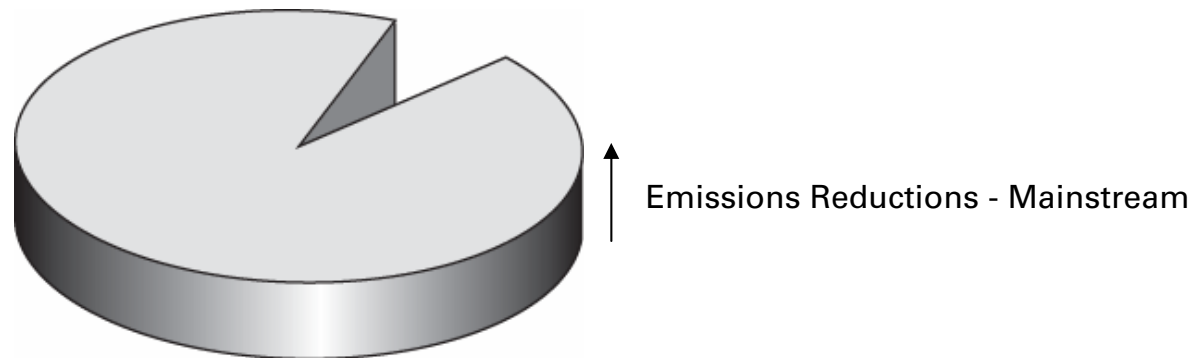
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Energy Transition Targets > The Role of Leading Cities

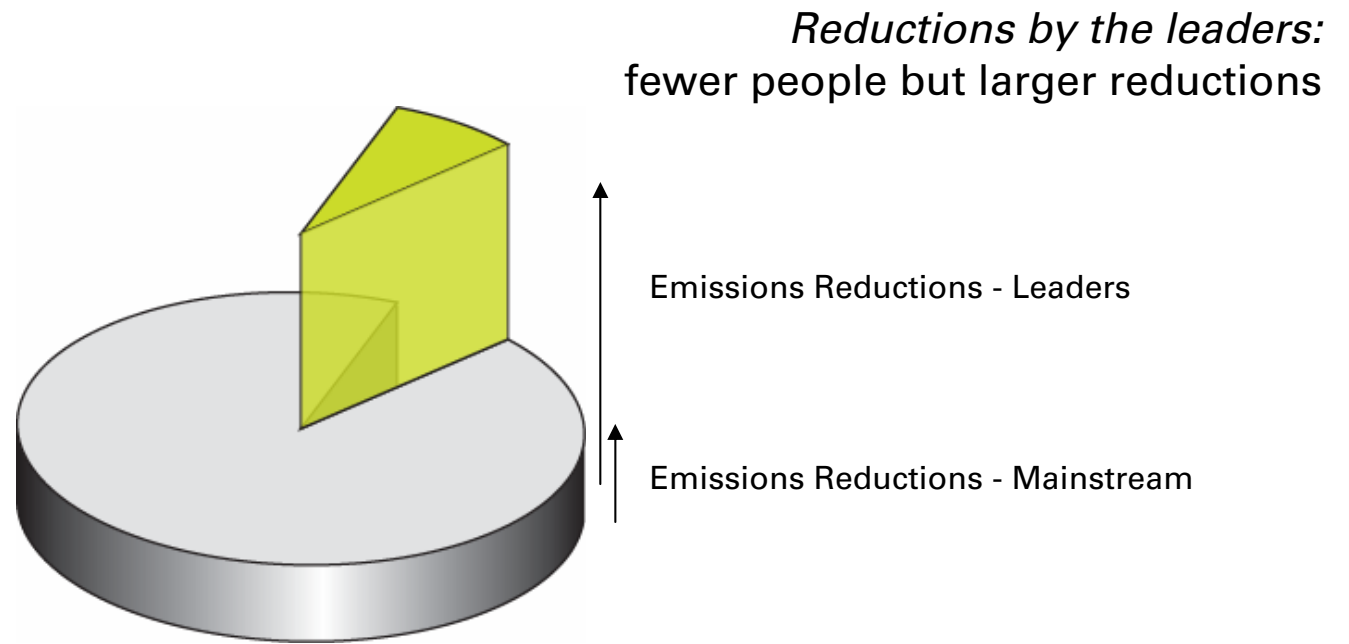
Global Emissions Reductions by 2050



Reductions by the mainstream:
larger percentage of people but lower reductions

Energy Transition Targets > The Role of Leading Cities

Global Emissions Reductions by 2050

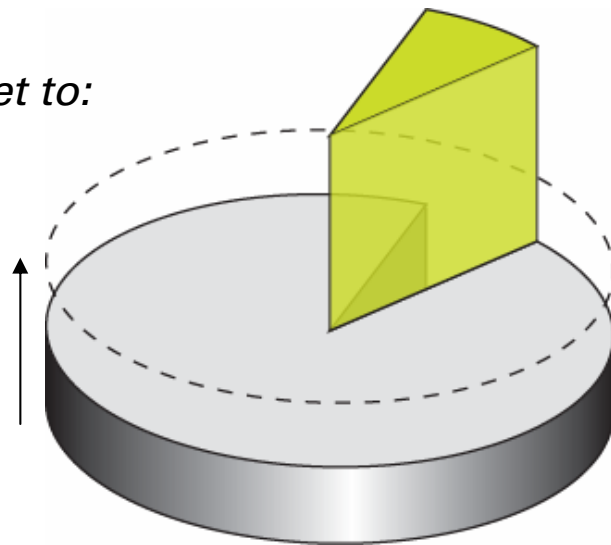


Energy Transition Targets > The Role of Leading Cities

Global Emissions Reductions by 2050

Where we need to get to:
(as a global average)

Emissions Reductions –
Global Average

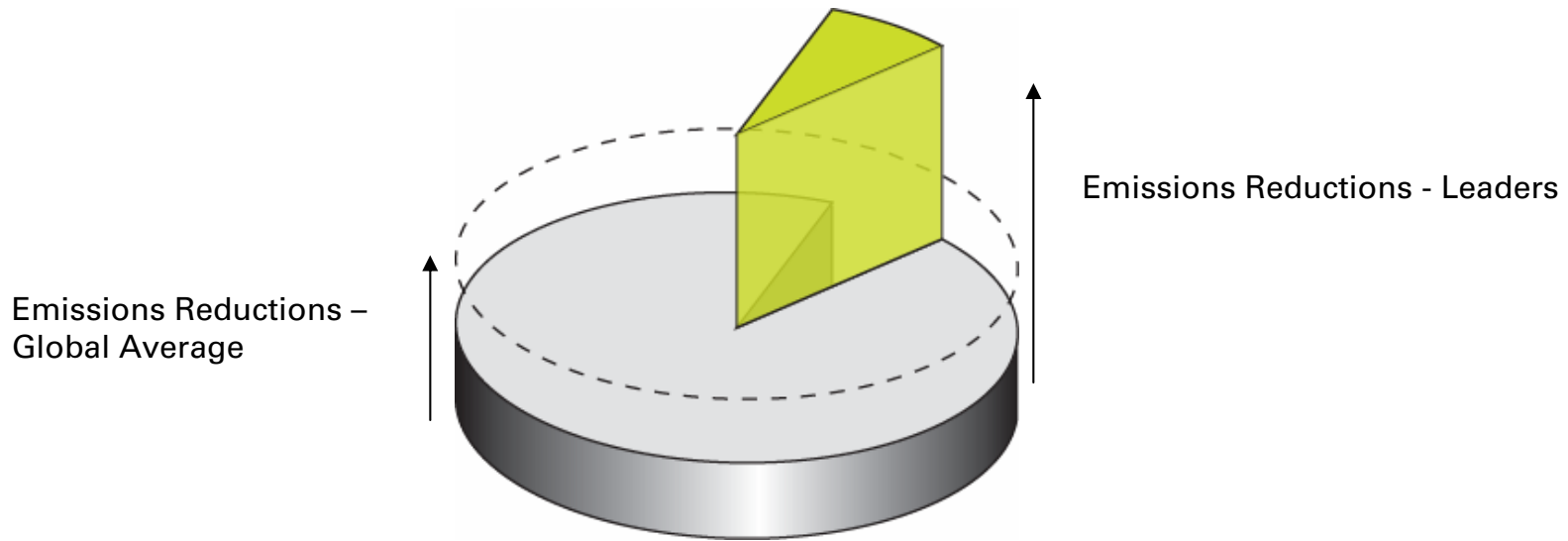


Emissions Reductions - Leaders

Emissions Reductions - Mainstream

Energy Transition Targets

Seeking Global Leaders > **Seeking Dynamic Cities**

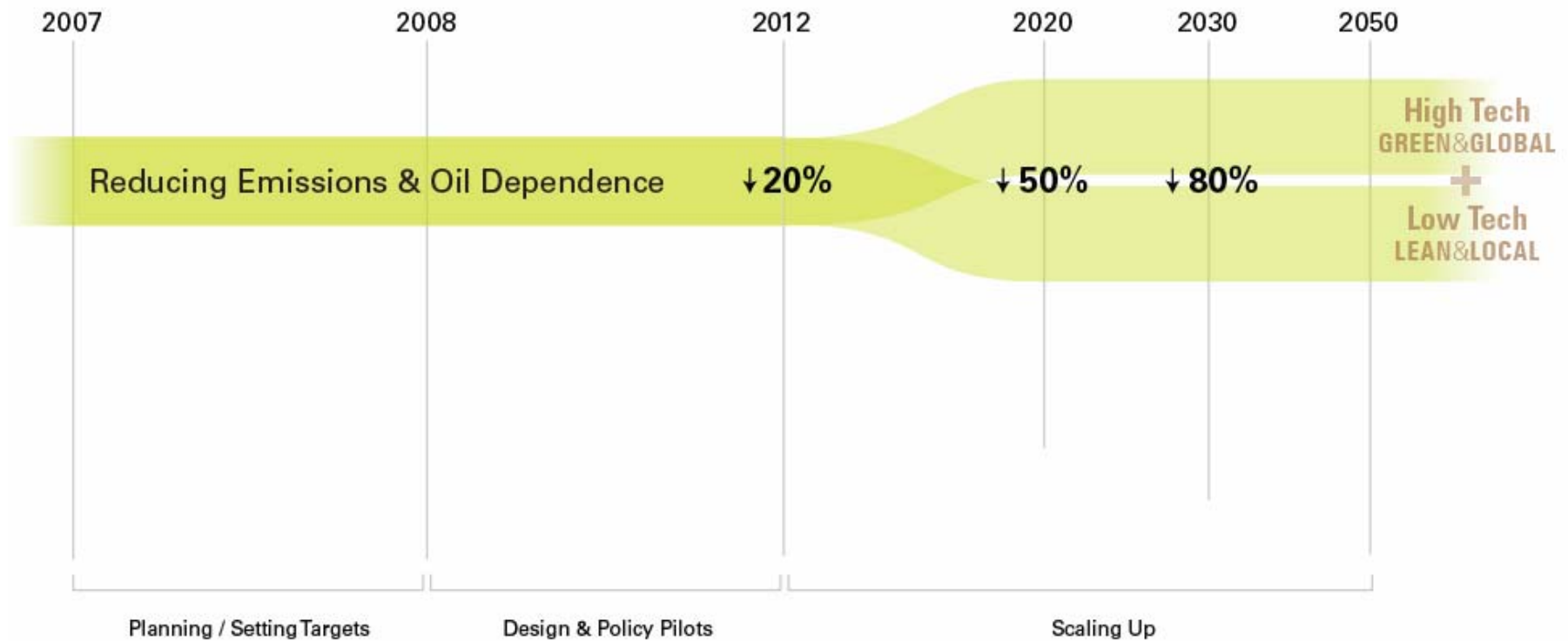


Energy Transition Targets > **Dynamic Cities**



Reducing Emissions & Oil Dependence

Timelines and Targets for the Dynamic City www.dynamiccities.org

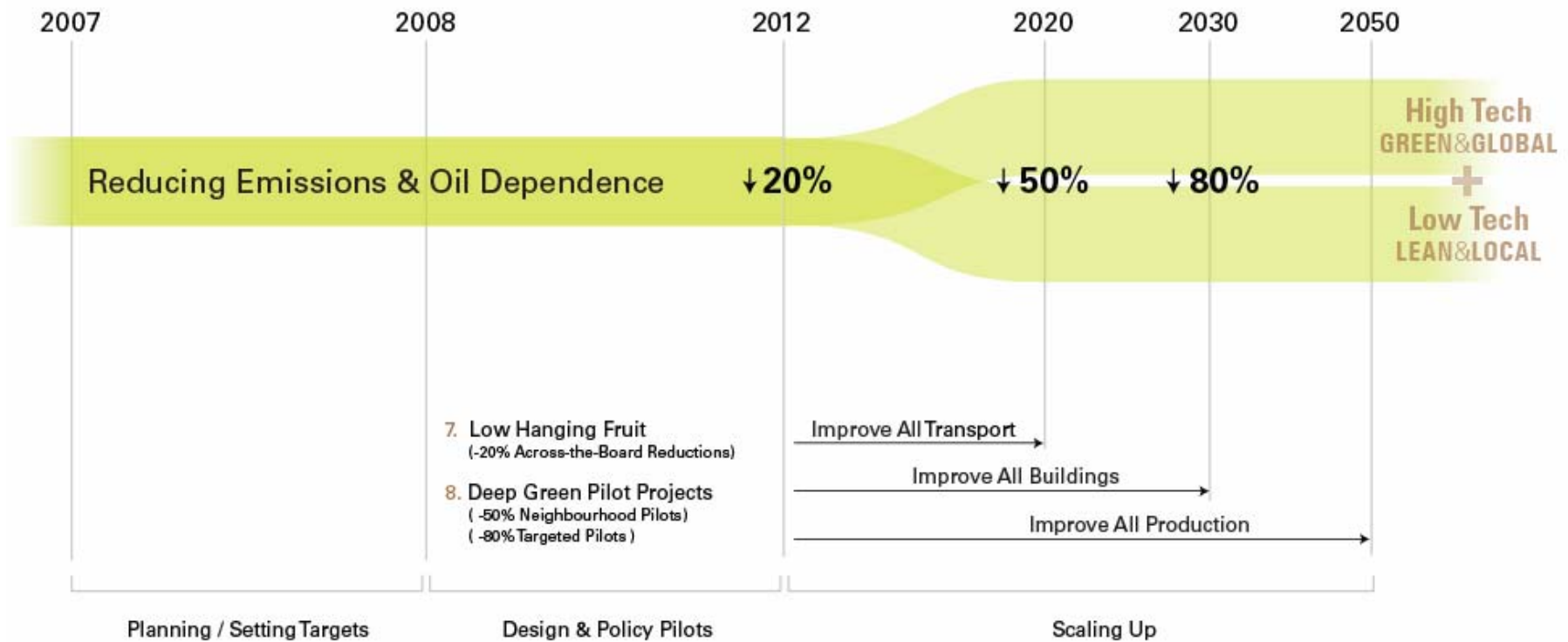


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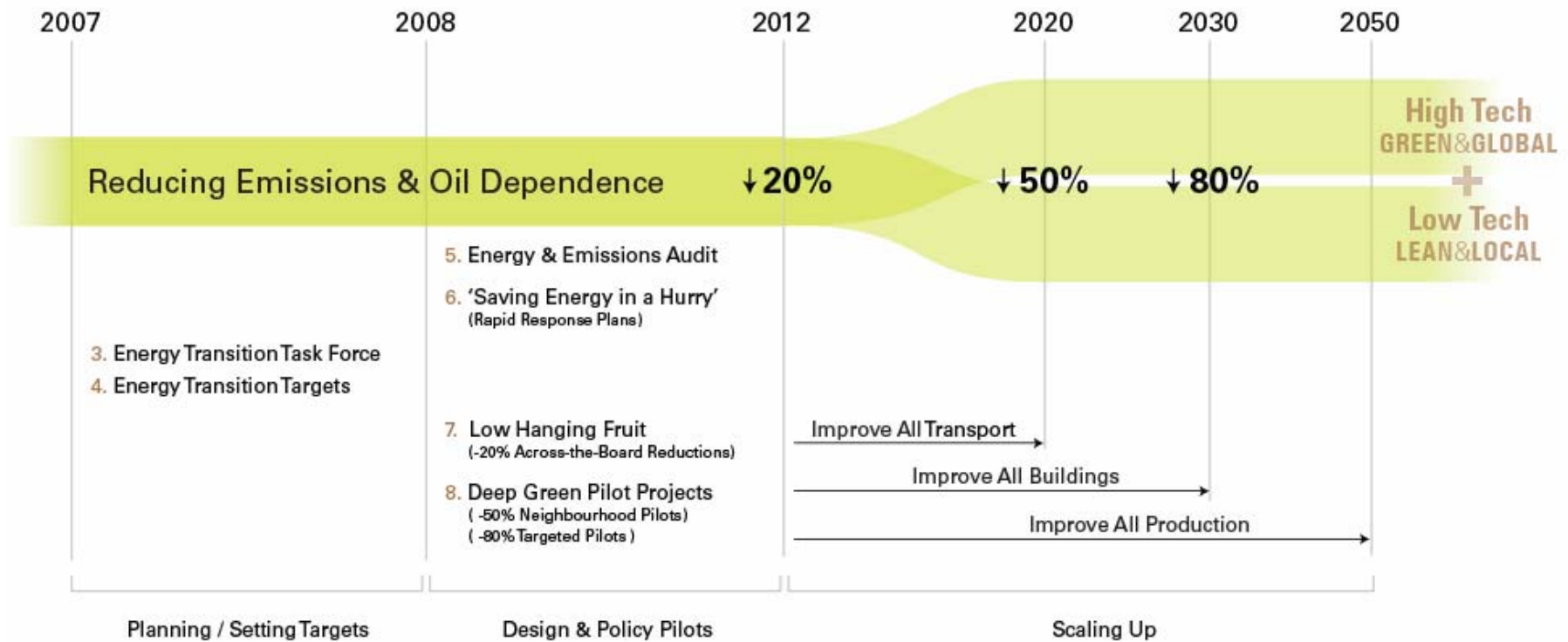


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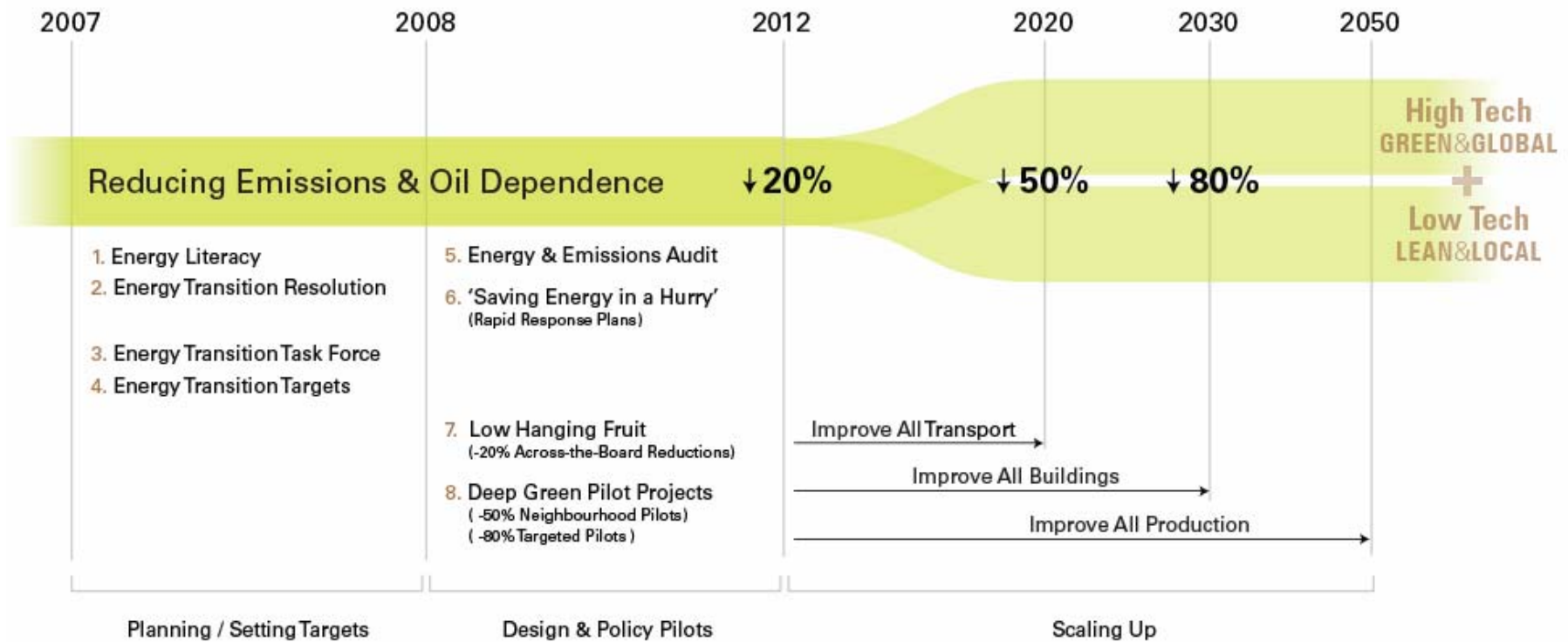


Energy Transition Targets > **Dynamic Cities**



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Energy Transition and the Dynamic City
targets and timelines for global leaders

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