

Community Energy Planning

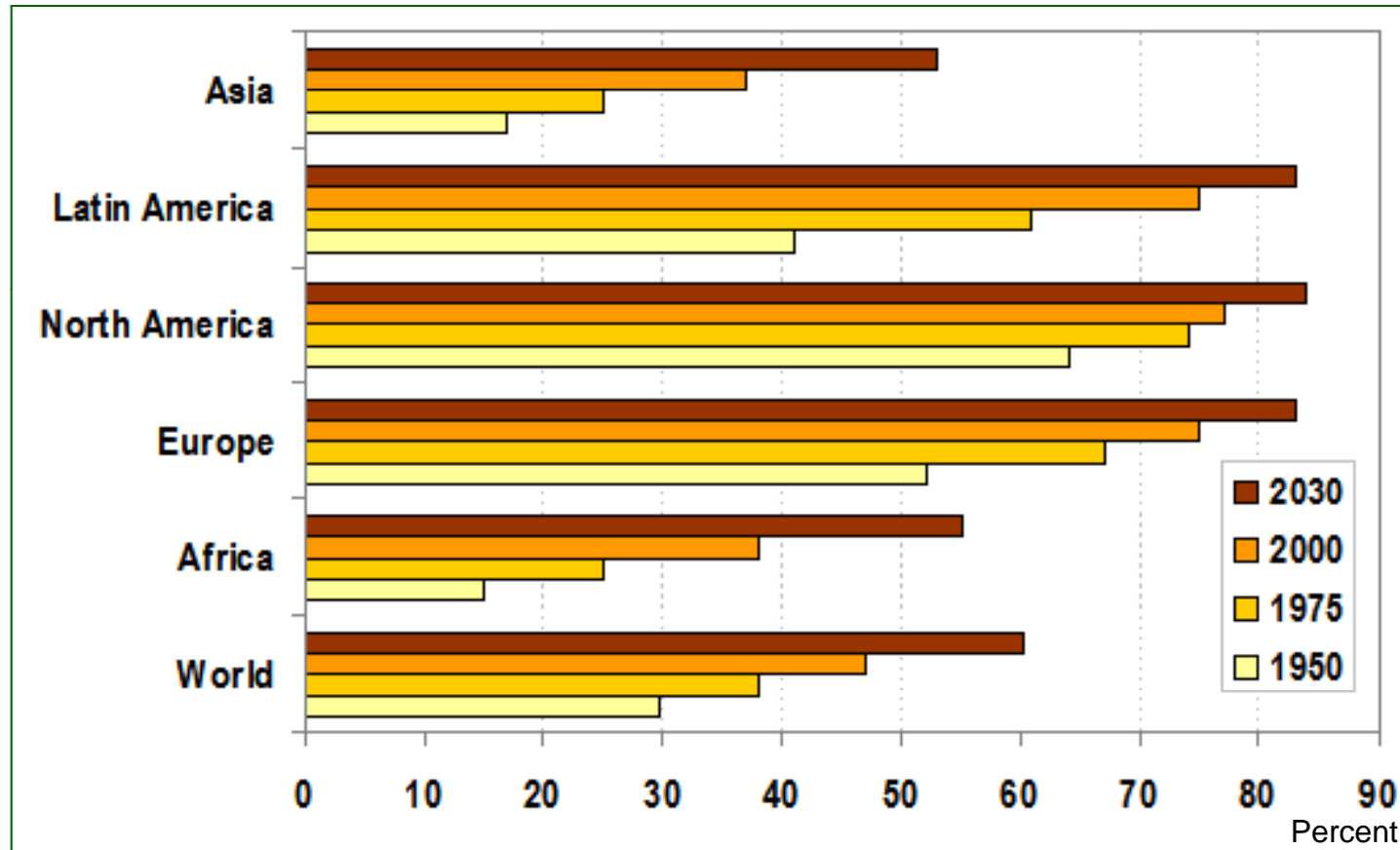
Creating Globally Competitive Communities



Washington Energy Summit
September 28th, 2011, Washington, DC

Most of us live in Urban Setting

70% of all Energy Use



Urban Population passed 50% in 2008

Why Communities Care *New Energy Realities...*

- Community Values and Image
- Investment and Green Jobs
- Unpredictable energy prices
- Supply quality and security
- Environmental legislation
- Global shifts in energy market
- Weather events
- Nuclear and coal uncertainties
- Lack of National Energy Strategies...

Fundamentally Different From Past

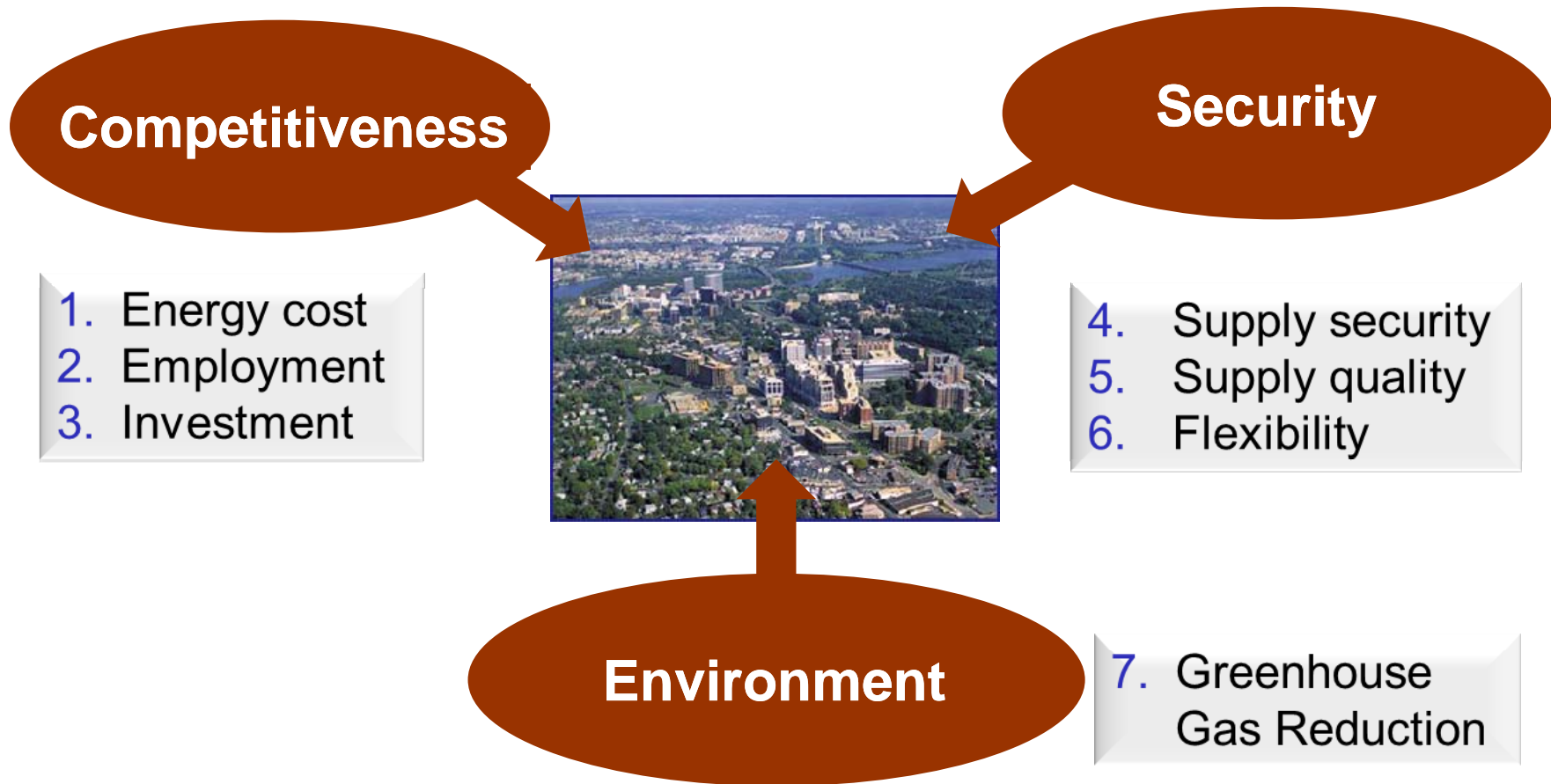
Typical Range of Community Responses

- Community Commitments
 - *Cool Climate Initiatives*
 - *US Mayors Climate Protection Agreement...*
- Directional Plans
 - *Climate / Sustainability Action Plans.....*
 - *Energy in Land Use and Master Planning*
- Clean and Efficient Initiatives
 - *Education and outreach*
 - *Community owned assets as examples*
 - *Voluntary private sector engagement*
 - *Demonstration projects*
 - *Selected policy changes or guidelines*
 - *Local incentives...*

Often Fail to Achieve Scale

CEP Takes a Comprehensive View

Three Groups of Benefits



Goals informed by Global Benchmarks

Baseline Benchmarking Example

Greenhouse Gas per Capita

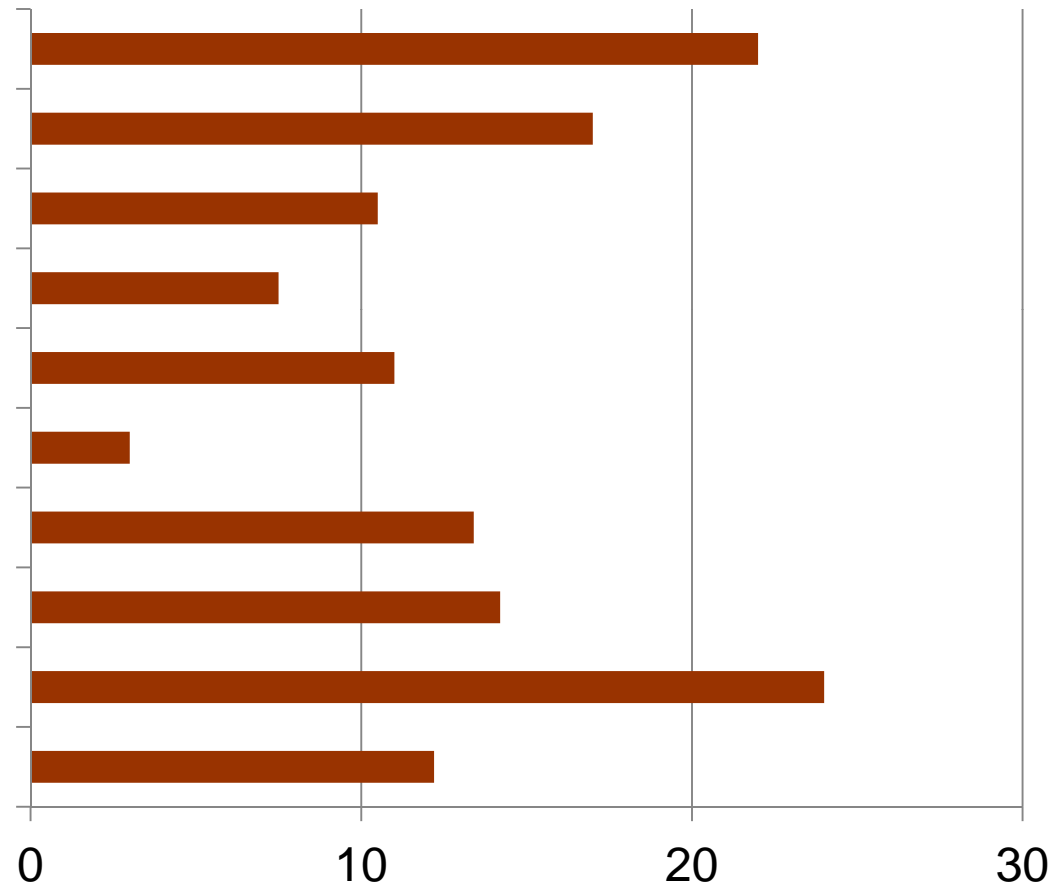


USA - Total
USA - "Municipal"



EU - Total
EU - "Municipal"

Mannheim, Germany
Copenhagen, Denmark
Arlington, VA
Loudoun, VA
Holland, MI
Guelph, Ontario



Global View Encourages Open Dialog

Benchmarking Goals Example

Greenhouse Gas per Capita



USA - Total
USA - "Municipal"



EU - Total
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Mannheim, Germany

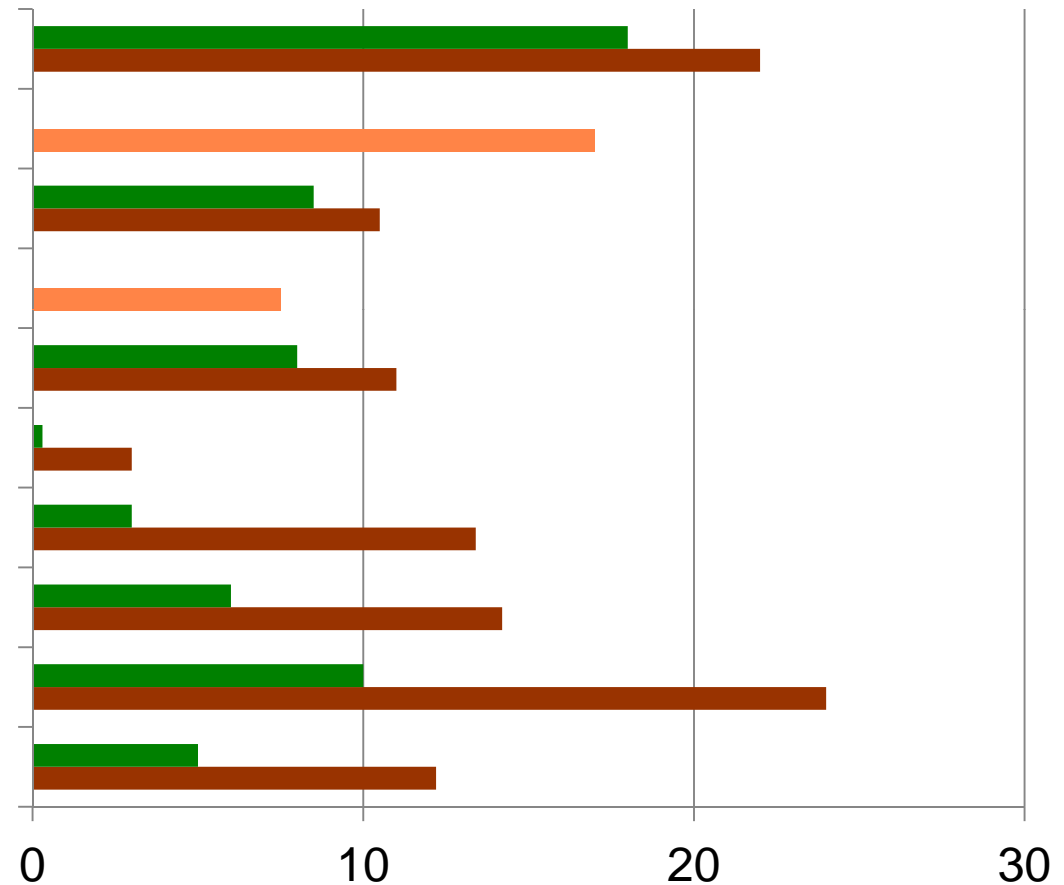
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Transparency of Community Challenge

Learning from European Benchmarks

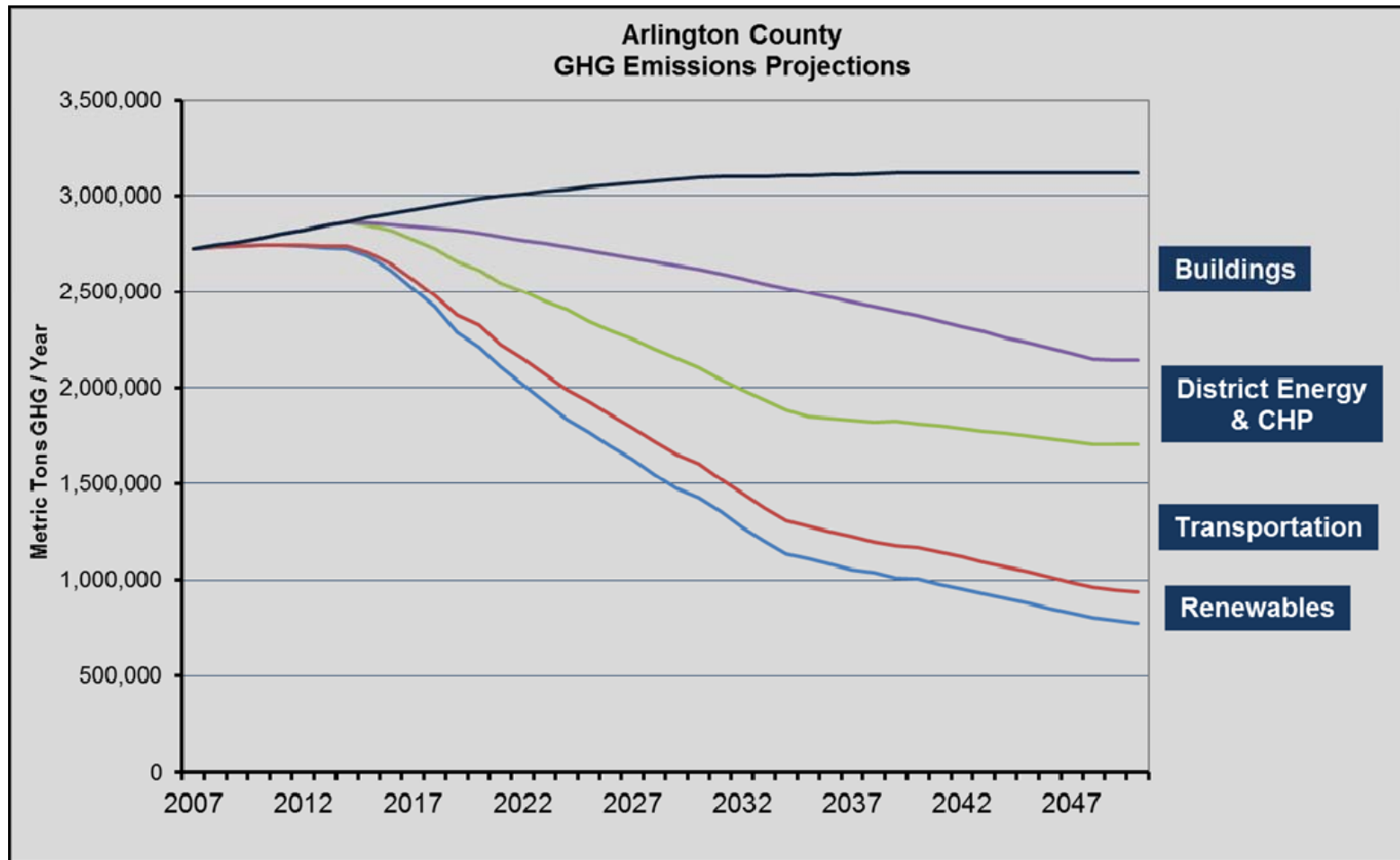
Loading Order Discipline

- Energy efficiency – ***If you don't need it don't use it***
 - *Efficient buildings , vehicles and industry*
 - *Urban design for transport efficiency*
 - *Local employment for commuting efficiency*
- Heat Recovery – ***It it's already there – use it***
 - *Combined heat and power*
 - *Use existing “waste” heat*
 - *Structure neighborhoods to share heat*
 - *Integrated industrial sites*
- Renewable energy – ***If it makes sense, go carbon free***
 - *Renewable electricity – Photovoltaic, Wind,*
 - *Renewable heat - Solar thermal, Biomass, biogas, geothermal*
 - *Renewable heat and power – waste-to-energy, biomass*
 - *Renewable transport fuels – ethanol, biodiesel, electricity*
- Energy distribution – ***Invest where it makes sense***
 - *Flexible distribution – electricity, gas, district energy...*
 - *Multiple fuels and conversion technologies*
 - *Optimize local / regional investments*

Prioritized – Sustained - Holistic

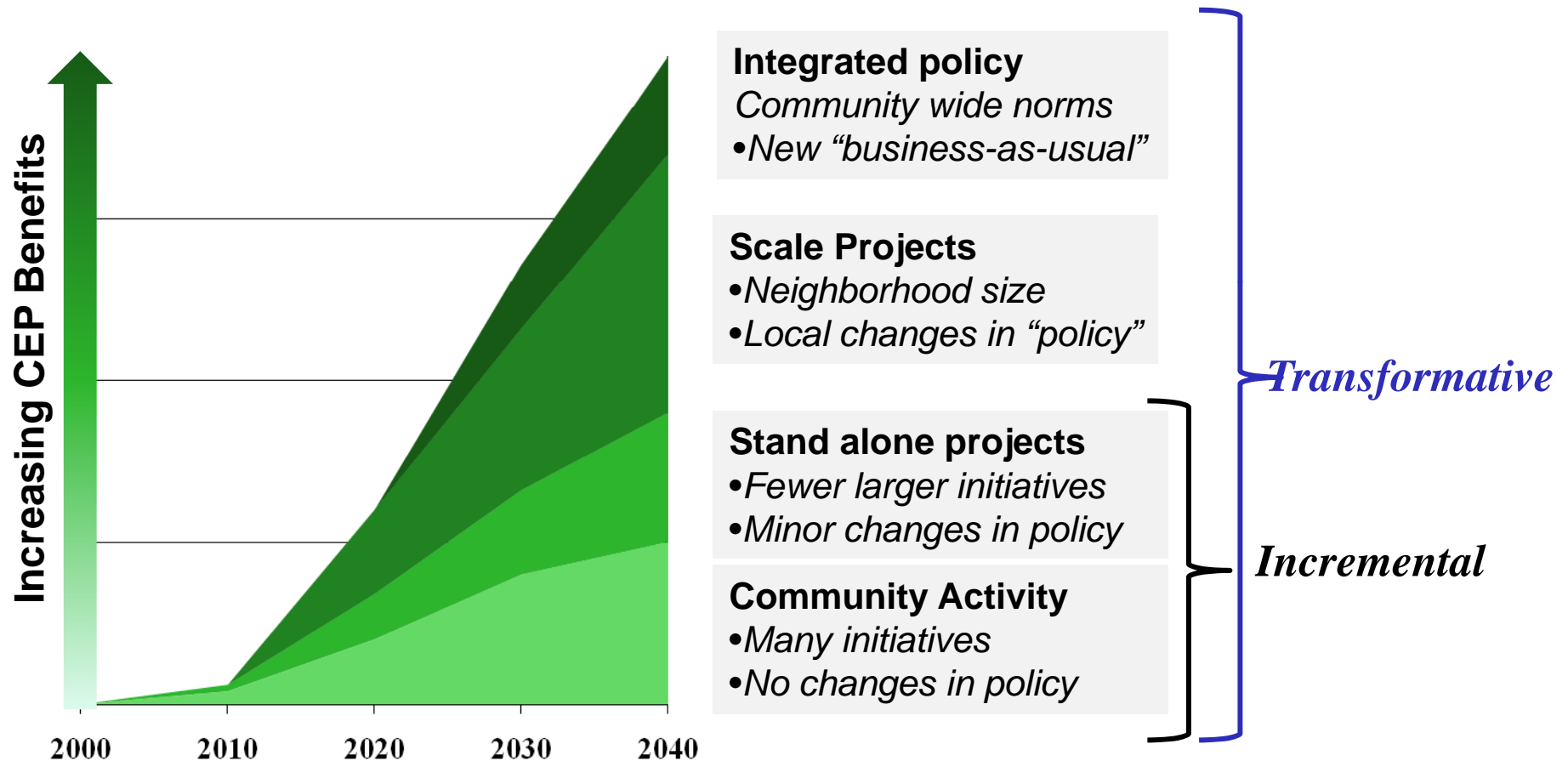
Clear Multi-Year Targets

Breakthrough Results are Possible...



Measure – Report - Accelerate

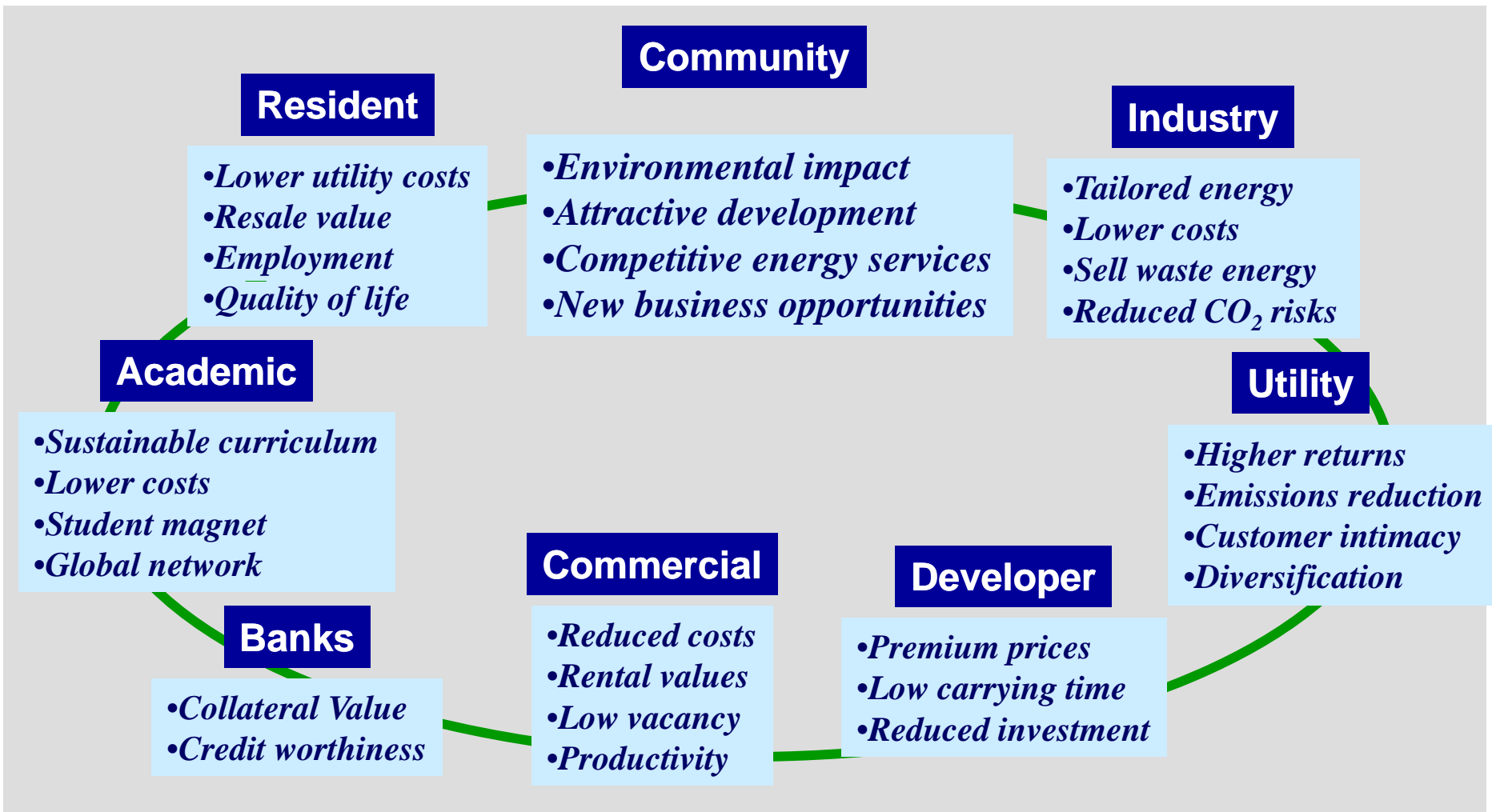
Transformative or Incremental *Importance of Early Scale*



Transformation – Rewarding but Uncomfortable!

Benefits of Winning!

Competitive-Sustainable-Flexible



New Relationships – New Rules

In Closing....

From City of Guelph , Ontario

- Passed CEP in 2007 by unanimous council vote
- National Role Model
- Over 2,000 Green jobs
- City influencing regional and national policy

Guelph boasts lowest jobless rate in country

Thursday, September, 15, 2011 - 10:10:02 AM

It may not be an all-time low, but Guelph's unemployment rate for August came close at 4.7 per cent – the lowest in the country.

“...Initiatives such as Guelph's Community Energy Initiative contribute to the long-term prosperity of the city and make it more appealing to business investment ...”

— Your Voice in Guelph —
GuelphTRIBUNE

Thank you!

*“Only Use what you Need, When you Need it,
In the Amount Needed!” **

**Courtesy of Toyota Manufacturing*