

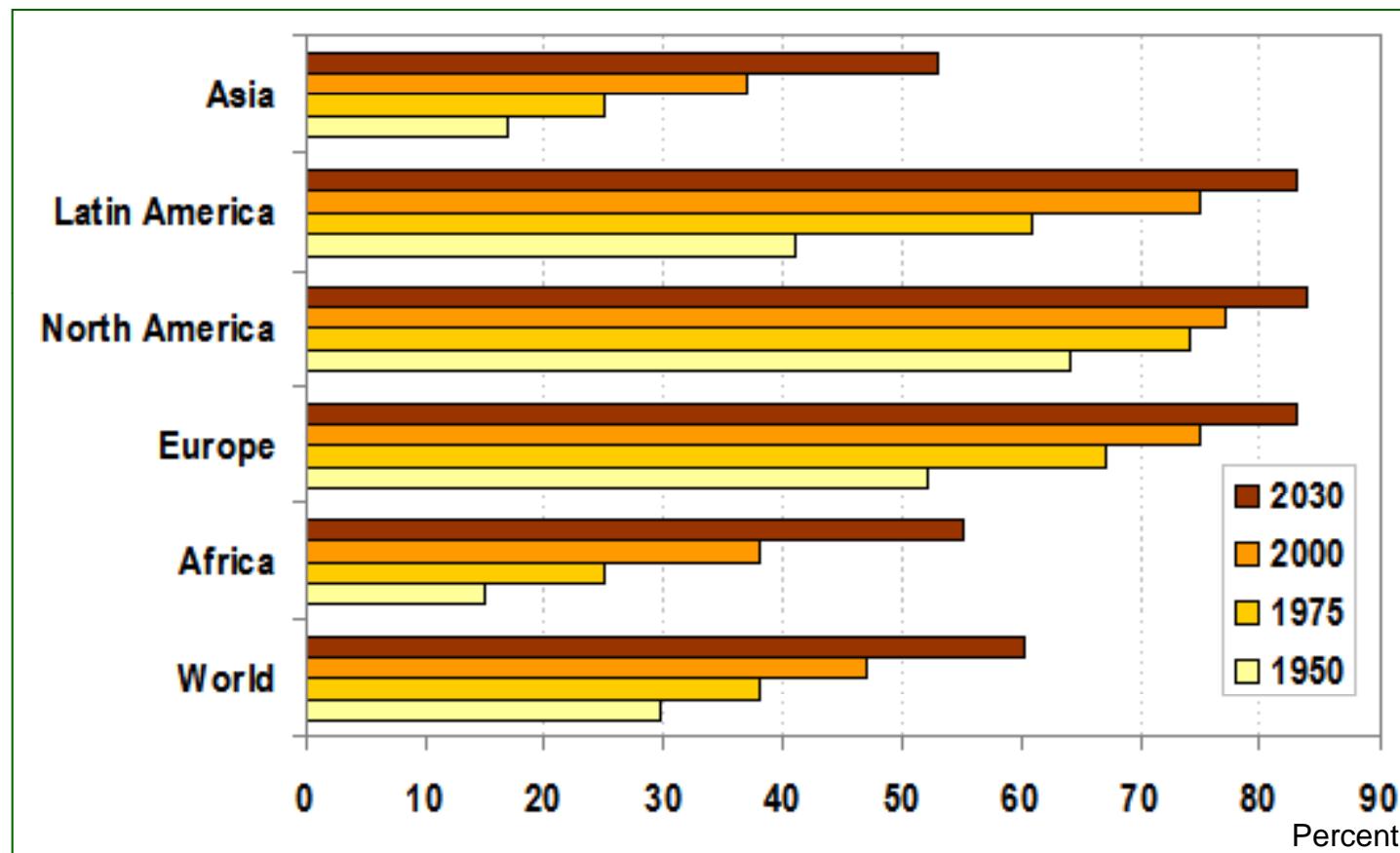
Community Energy Planning

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

*UN Sources

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

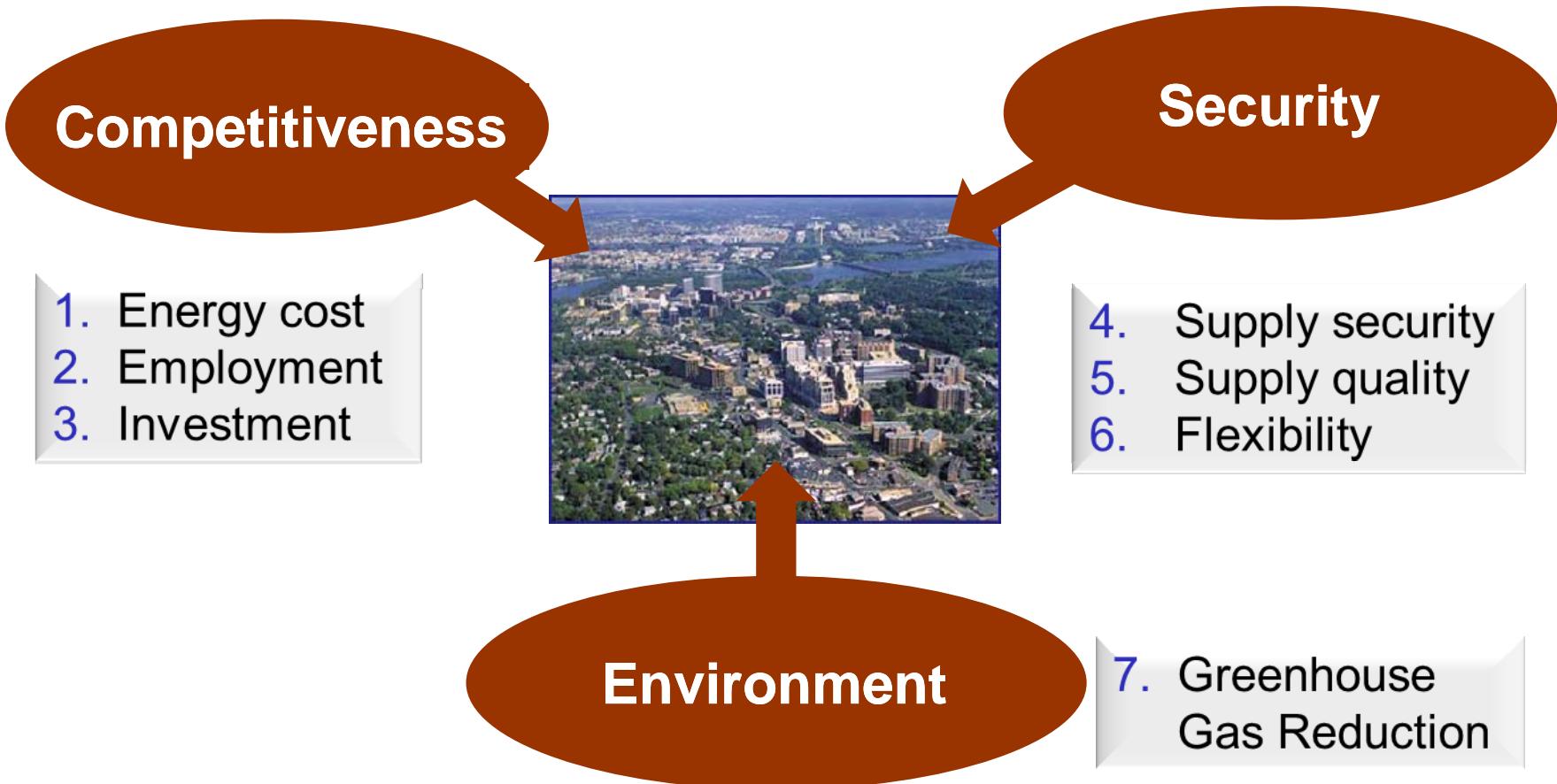
Typical Range of Community Responses

- 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

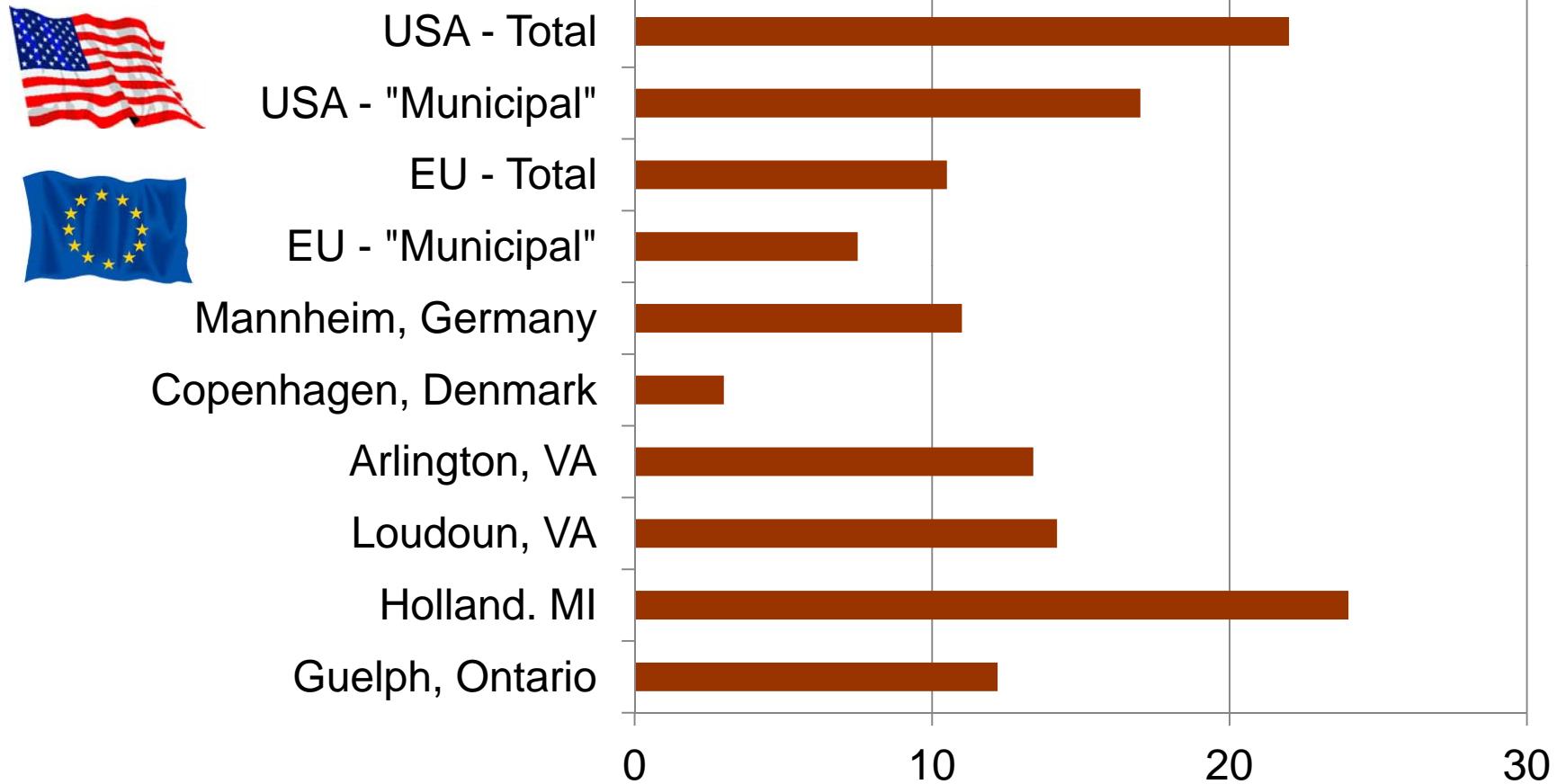
Three Groups of Benefits



Goals informed by Global Benchmarks

Baseline Benchmarking Example

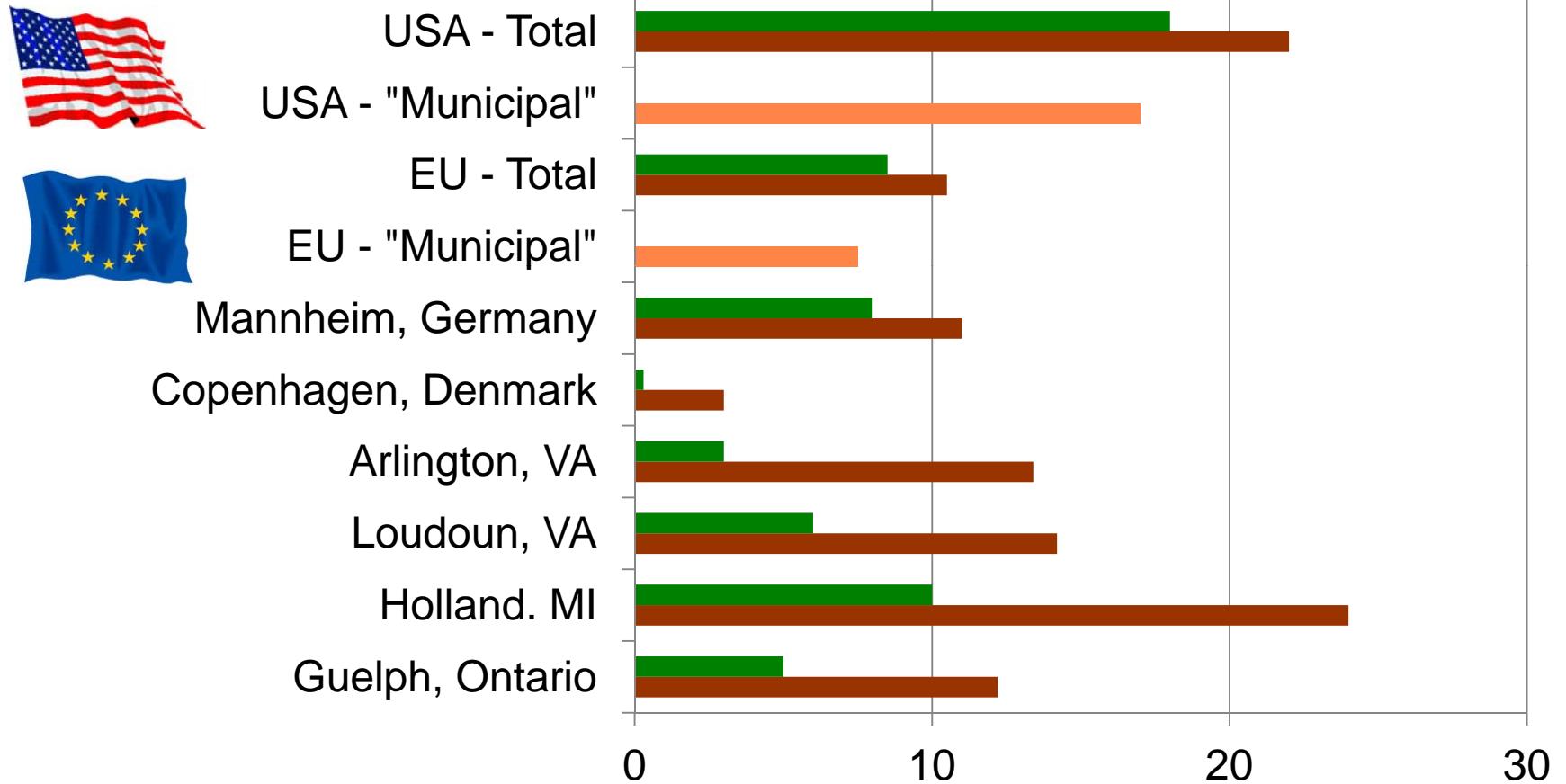
Greenhouse Gas per Capita



Global View Encourages Open Dialog

Benchmarking Goals Example

Greenhouse Gas per Capita



Transparency of Community Challenge

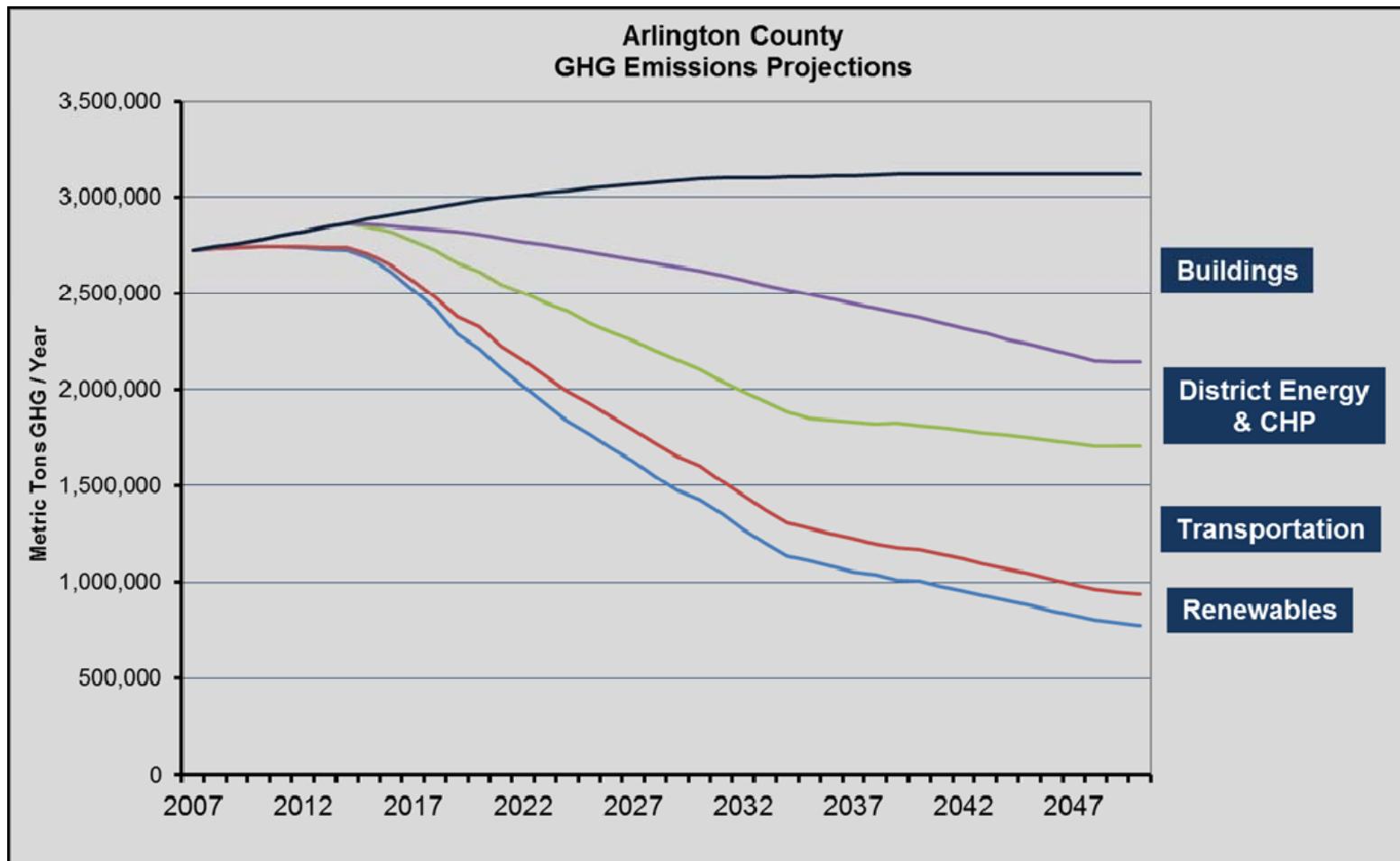
Learning from European Benchmarks

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

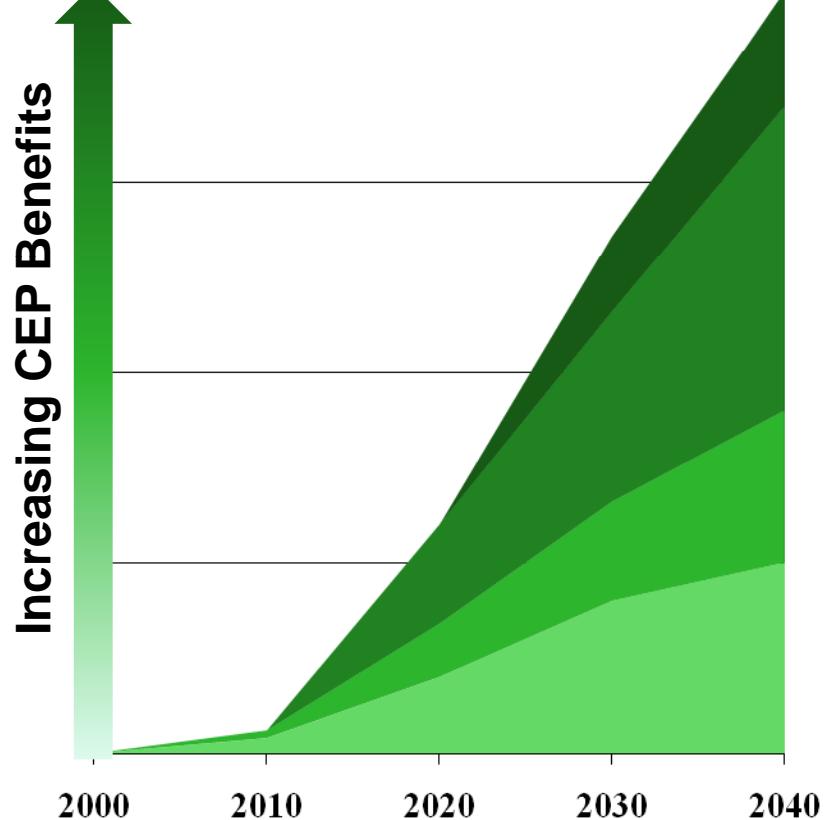
Clear Multi-Year Targets *Breakthrough Results are Possible...*



Measure – Report - Accelerate

Transformative or Incremental

Importance of Early Scale



Integrated policy

Community wide norms

- New “business-as-usual”

Scale Projects

- Neighborhood size

- Local changes in “policy”

Stand alone projects

- Fewer larger initiatives

- Minor changes in policy

Community Activity

- Many initiatives

- No changes in policy

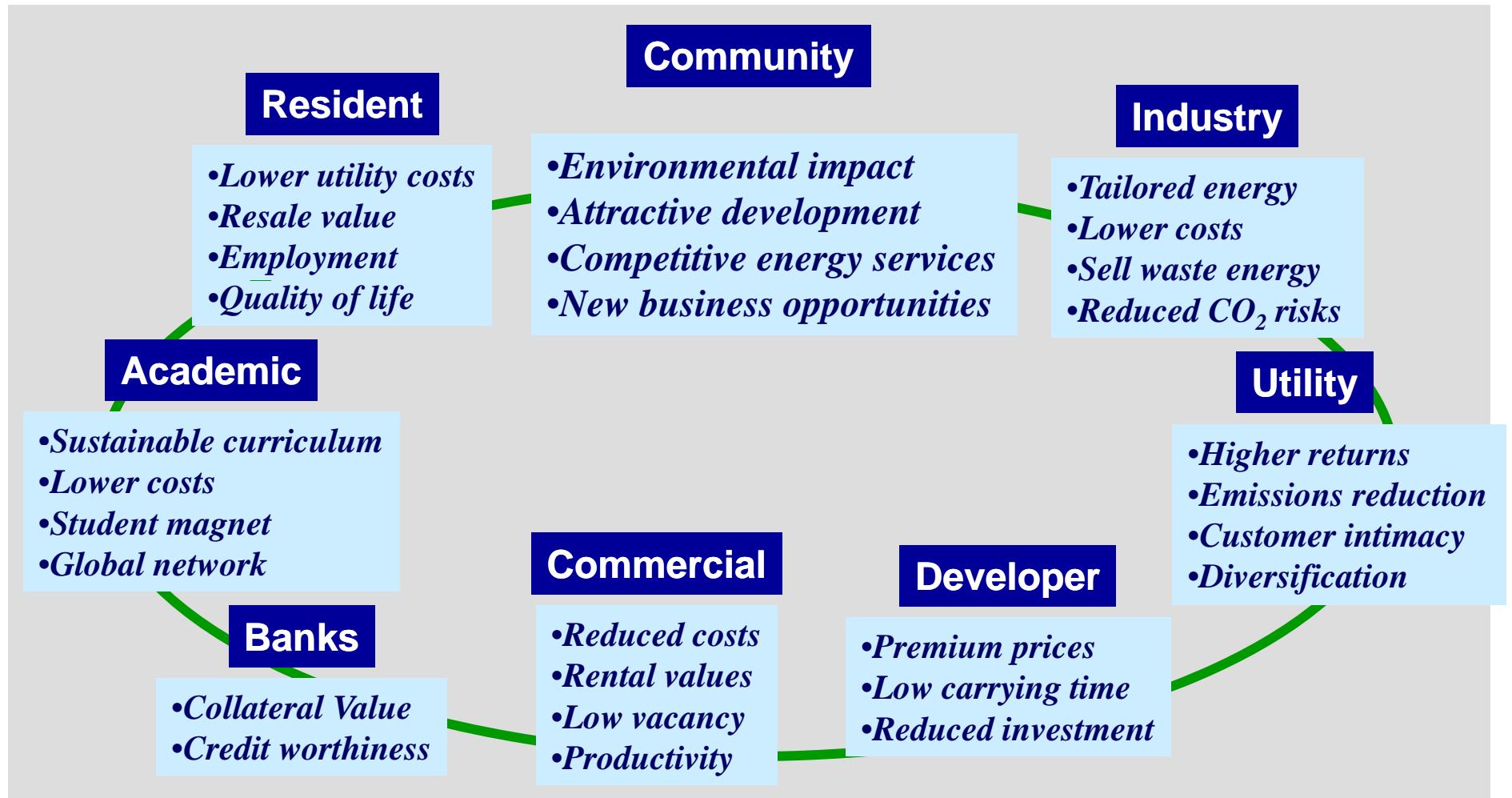
Transformative

Incremental

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*