

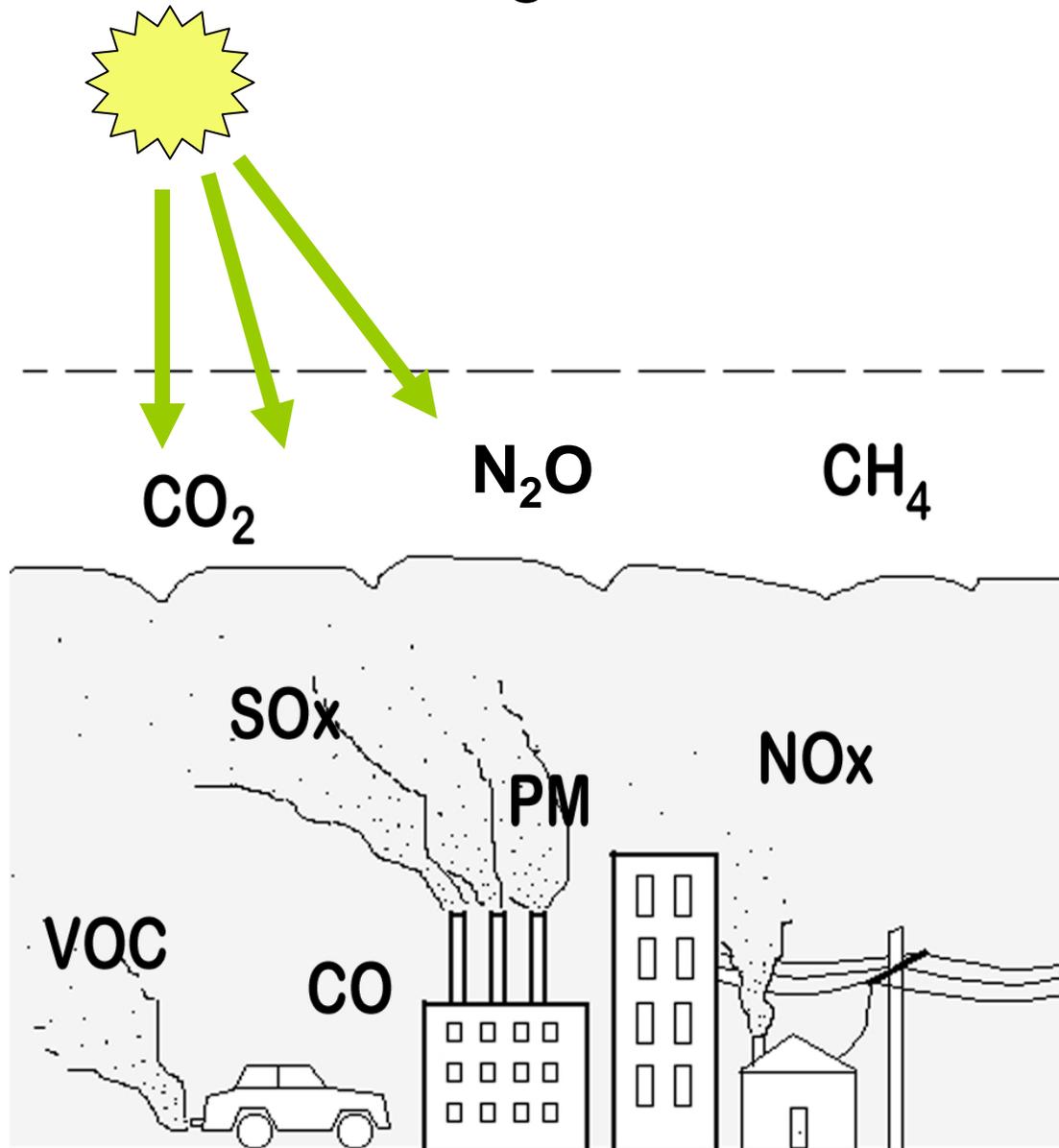
Greening of Fort Wayne

Indiana Finance Authority
Sustainability Workshop

June 5, 2008



Issues Surrounding Energy Source, Global Warming and Air Pollution are Linked



Burning fossil fuels release both:

- Heat trapping *greenhouse gases*

responsible for:

- Smog,
- Health problems
- Reduce visibility
- Diminished quality of life

Energy Realities



- Demand up
- Supplies Diminishing
- Vulnerable
- Our use is national security concern
- Cost is up 50% - 2001
- ++ Air pollution and climate change



City of Fort Wayne

- Population 250,000
- City of three rivers
- 1,200 linear miles of streets
- 3,000 + lane miles
- 92 square miles
- Water treatment averages 34 MGD
- Wastewater treatment average design flow 50 MGD
- Buildings
- Many parks



History

- Participating in
 - DOE Clean Cities
 - US Mayors Climate Protection Resolution
 - ICLEI's Cities for Climate Protection campaign
- Formed Green Ribbon Commission 2006
 - Focused on energy use and air quality
 - High level policy focus
 - Members were community leaders



Green Ribbon Commission Report

“Findings and Recommendations”

- There are 12 Policy Recommendations
 - **Transportation**
 - **Buildings**
 - **City Operations**
 - **Policy and Regulations**



Reduce dependence on traditional automobiles and trucks

Reduce amount of gasoline used by City Fleet 5% by Dec 2007

- alternative fuel vehicles
- trip reduction



Toyota's Prius G seats five and boasts world-leading fuel efficiency and performance.



Transportation

Increase availability of transportation choices



Increase funding for public transportation 20%

Increase bike lanes 25 miles by Dec 2009



Transportation

Improve energy efficiency of existing buildings

Reduce energy use in City buildings 10% by 2010

- Operations
- Lighting
- Building monitoring

MEET 2030 CHALLENGE



Buildings

Support developers, homeowners and landlords in reducing energy use



Reduce community and commercial energy use 10% by 2010

- Existing home demonstration
- Program that encourages landlords to upgrade energy efficiency



Buildings

Add renewable energy sources



Implement renewable energy portfolio of 5% by 2010

Identify sources of renewable energy City operations by Dec 2006 and implement by 2010



City Operations

City's Energy Policy

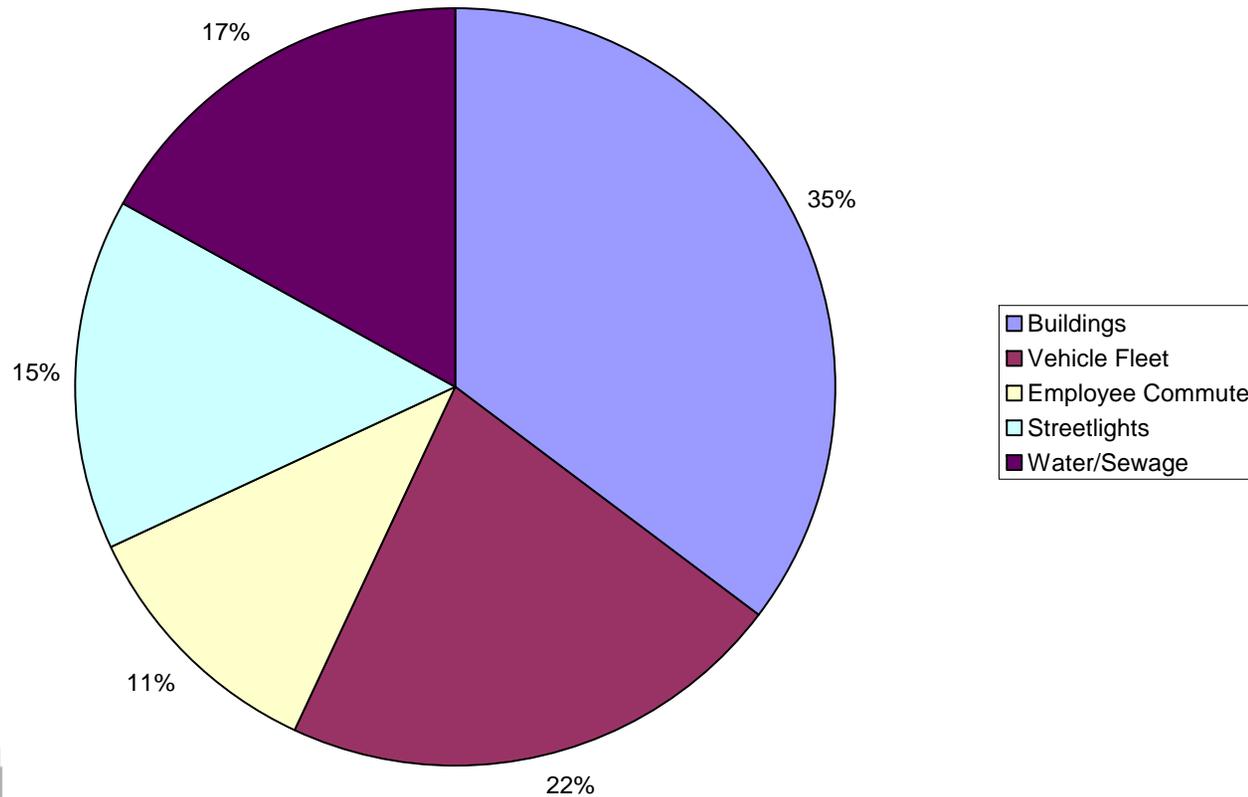
energy conservation, energy efficiency and use of renewable energy systems in all city operations and planning” . . . “The City will also work to educate and support citizens. . . .”

- *Includes some quick wins*



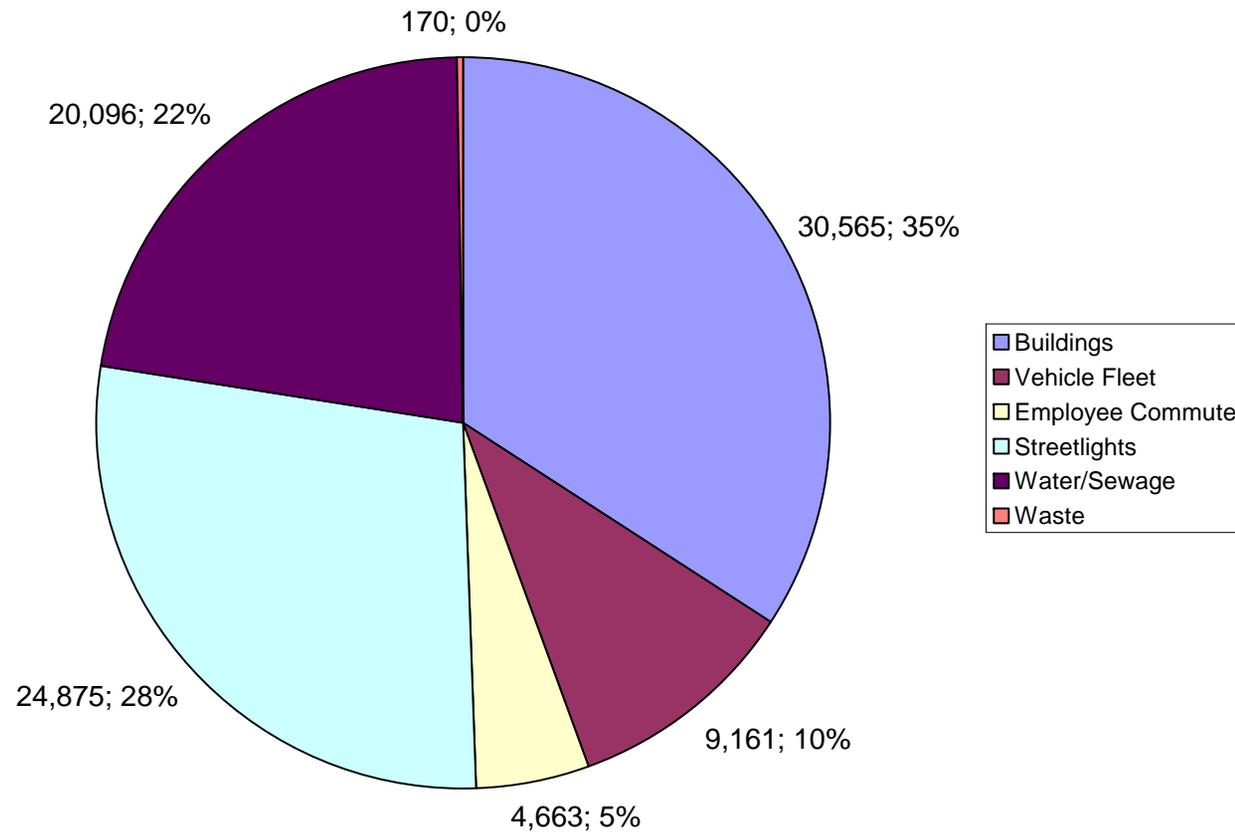
Government Baseline

Government Energy Use by Sector



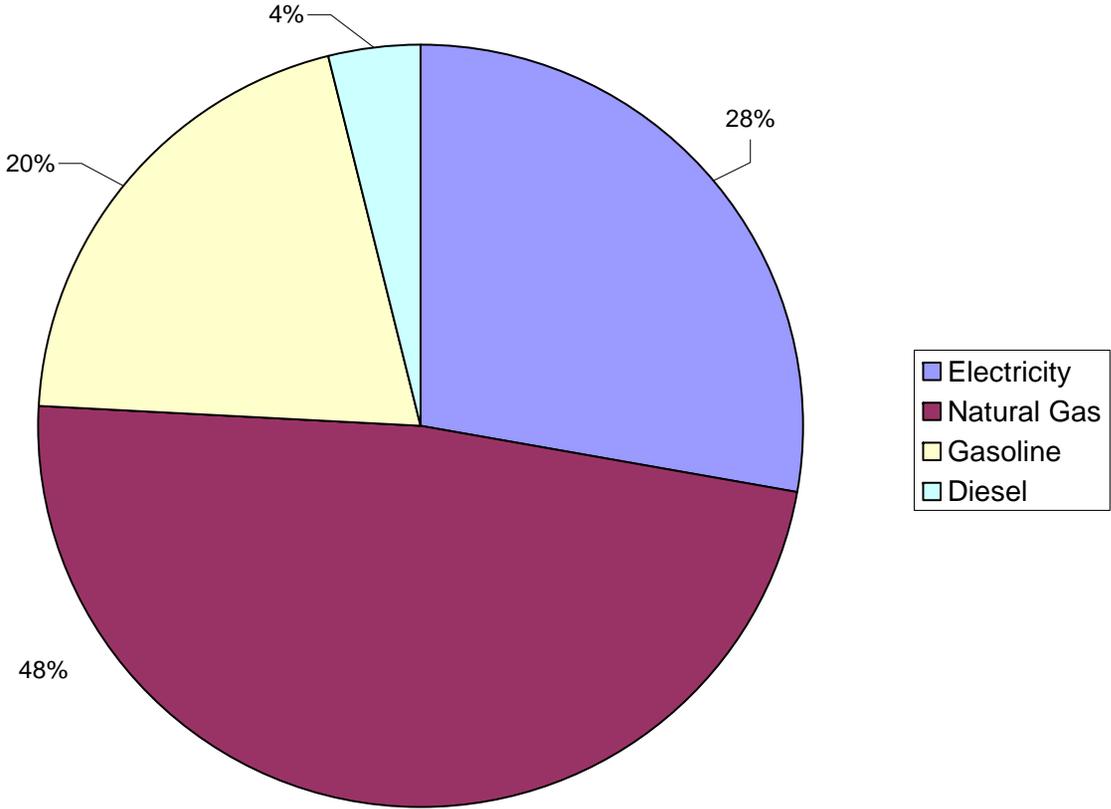
Government Baseline

Government Greenhouse Gas Emissions (Tonnes)



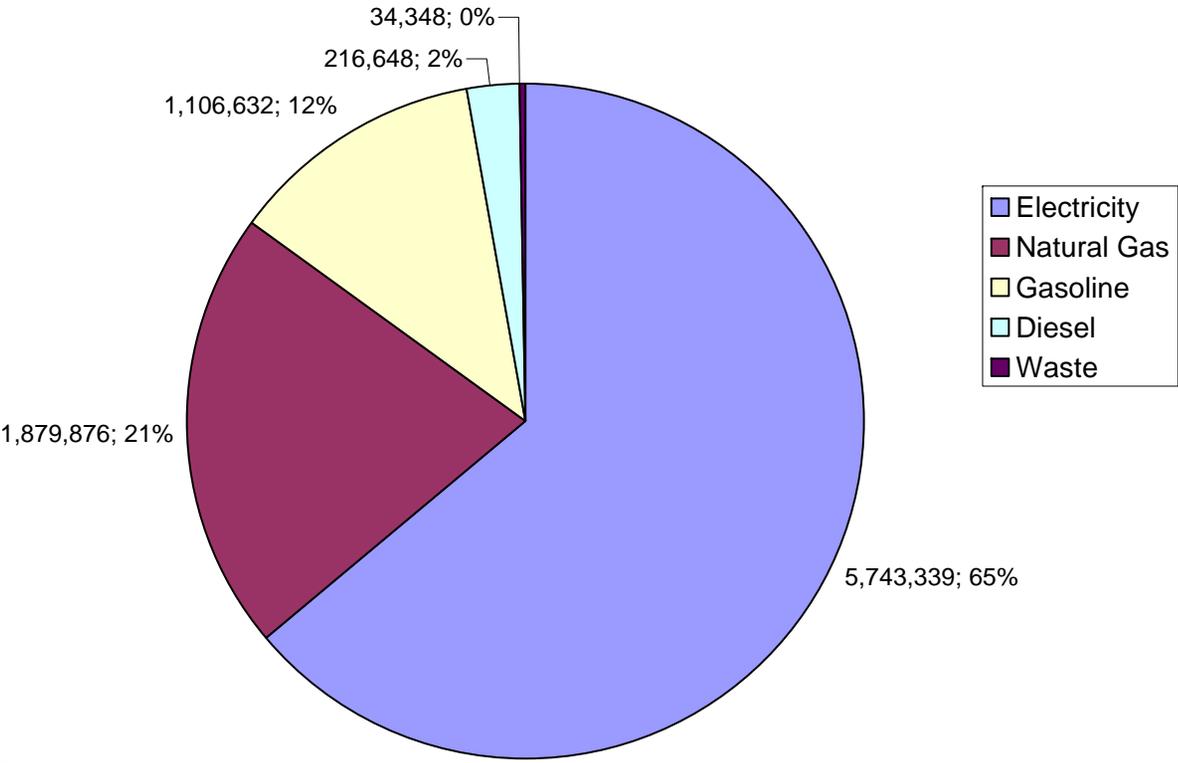
Community Baseline

Community Energy Use By Fuel Type



Community Baseline

Community Equivalent Tonnes CO₂ Emissions By Fuel Type or Source



Current Fleet Status

- Idle Reduction program
- Hybrids
- All City diesels using B20
- Reducing vehicle trips
- Flex fuel vehicles
- E85 pumps available at retail outlets



Idle Reduction Program

- Software installed on 277 trucks
 - Estimated savings \$72,000 per year (1 hour per day saved, 1 gal per hour of idling)
 - First month gas mileage increase 0.1mpg
 - Currently at 1mpg increase
- City Energy Policy for all others



Hybrids

- 20 Hybrids – Ford Escapes and GM pickups
- Beta testing a conversion to hybrid of 1 dump truck – fuel savings 30-45%
- 7 year life cycle – estimated five year pay back now decreased to 4 years
- Driver training is critical to achieve maximum fuel savings



B20 – ASTM D 6751

- Use premium diesel for mileage increase
- Joint purchasing agreement
 - Citilink and Ft. Wayne, Southwest and Northeast Allen County public school buses
 - Allen County beginning to convert
- Change over
 - Cleaned storage tanks and changed pump filters
 - Fuel filter changes at 100 hours



B20

– Savings

- Fuel costs none
- Expecting some when local plants come online

– Emissions

- NO_x + 1 – 2%
- PM – 22%
- CO -- 20%
- HC -- 30%
- Sulphates – 20%
- Mutagenicity – 20%



Streets

- All Traffic lights to LED
 - 5,800
 - \$145,000 savings
 - Payback 2.4 years
- Christmas LED \$1400
- Testing LED Street Light



Brownfields

- Renaissance Pointe
 - Neighborhood community
 - Smart Green House
- Harrison Square
- Incentives – just started



Guaranteed Energy Savings Contract

- Allowed under State law
- Use the savings in energy to finance the energy efficiency project
- RFP out – proposals due July 1
- Feasibility study estimated 9% savings
- Typical projects 10 – 20%
- Estimated savings \$100,000 - \$250,000 per year



Implementation of “Green”

- Need a champion – Mayor or Director
- Need goals
- Need to measure – Portfolio Manager
- Staff level work groups
- Communication to upper management
- Need designated person to coordinate efforts



Challenges

- Organization resistance
- Increased fiscal concerns increase resistance
- Expect transitions to create a period of “pausing”
- Communication within and externally is difficult
- Community awareness



Communication -Use the Tools

- Website
 - Tips and tools
 - Documents
 - Etc.
- Monthly – e-newsletter
- Internal meetings
- External presentations



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