

Town of DeWitt

SUSTAINABILITY

DEFINITIONS

MOVEMENT

CONCERNS

LOCAL (GREEN) INITIATIVES

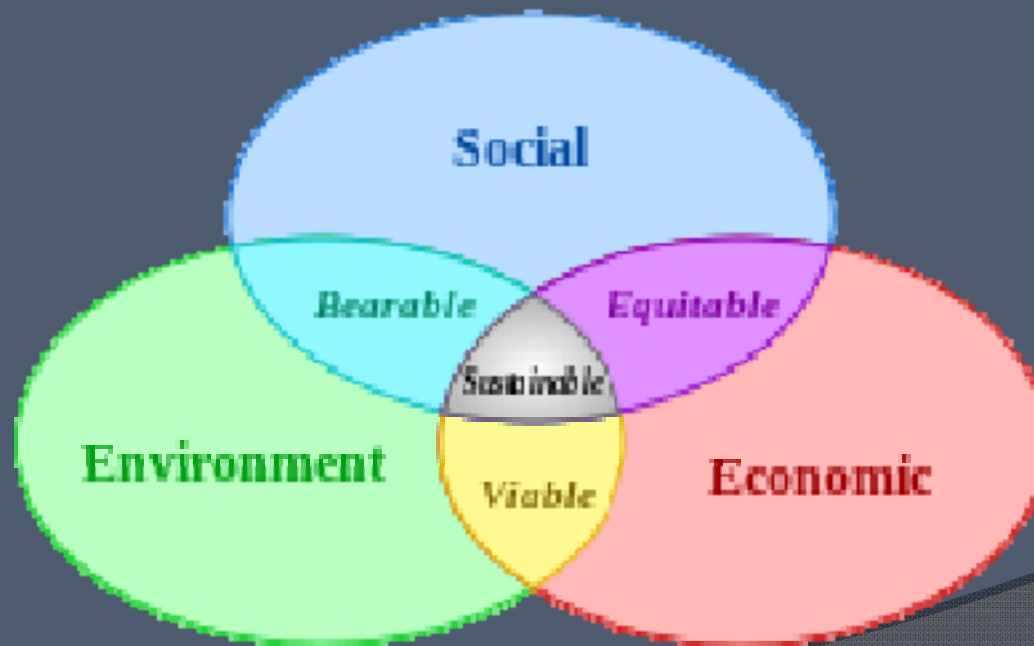
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Sustainability Definition

- Improve the quality of human life via enhanced environmental, social and economic conditions.

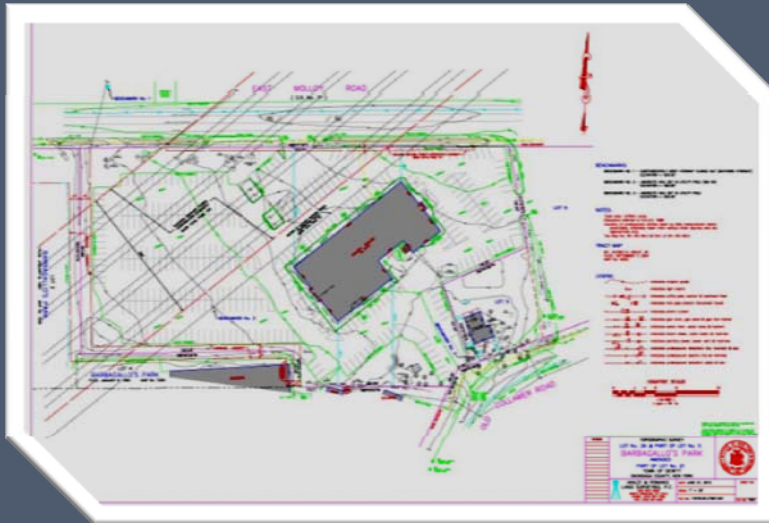


Sustainability

- ◎ 20th Century environmental movement
- ◎ Fossil fuel crisis
- ◎ Advances in medicine
- ◎ Global Communications
- ◎ Greenhouse gas effects/climate change
- ◎ Economic Crisis
- ◎ Wars

Study of Sustainability

- ◎ Scale & Context
 - Global
 - Project



Environmental Management

- Air quality
- Water resources
- Land use
- Human consumption
- Energy Policy
- Food security
- Materials use
 - Recycling
 - Toxic substances
 - Waste disposal



Economic Area of Study

- Ecological economics
- Environmental economics
- Green economy



Economic Growth & Environmental Degradation

- Sea level rise
- Major storms
 - Natural coastline buffers (cypress & mangrove swamps)
- Local conditions
 - Red maple swamps
 - Trees, utility, right-of-way
- Pollution (air, water, land)/Prevention
 - Onondaga Lake
 - Hazardous Waste Sites
 - Brownfields
- Negative impacts
 - Human health, environment & economy
 - Local level/property values

Social Dimension

- ⦿ Peace
- ⦿ Security
- ⦿ Social justice
 - Poverty
 - Equal opportunity



Sustainable Development

(Smart Growth/Green Building Practices)

- Reduce fossil fuel use/smart growth
- Alternate energy strategies
- Small scale economics
- Lower material consumption (metal, minerals, chemicals)
- Increase renewable resource use (recycling & reuse)
- Less encroachment/urban sprawl
- Mass transit and alternate transportation options

Agenda 21



- United Nations (UN) (1992)
- Non-binding/volunteer participation
- Action plan to Sustainable Development
- Multi-lateral organization & individual governments
- Global, national and/or local implementation
- Affirmed and modified at subsequent UN conferences

Agenda 21 Contents

Section I:

- *Social and Economic Dimensions* is directed toward combating poverty, especially in developing countries, changing consumption patterns, promoting health, achieving a more sustainable population, and sustainable settlement in decision making.



Agenda 21 Contents (Cont.)

Section II:

- *Conservation and Management of Resources for Development* includes atmospheric protection, combating deforestation, protecting fragile environments, conservation of biological diversity (biodiversity), pollution, management of biotechnology, and radioactive wastes.



Agenda 21 Contents (Cont.)

Section III:

- *Strengthening the Role of Major Groups* includes the roles of children and youth, women, NGOs, local authorities, business and industry, and workers; and strengthening the role of indigenous peoples and farmers.



Agenda 21 Contents (Cont.)

Section IV:

- *Means of Implementation* includes science, technology transfer, education, international institutions and financial mechanisms.



United States Support

- President George Bush, Signed in 1992
- Non-binding, statement of intent
- Not a treaty, not law, no Senate involvement
- 528 local governments are members of International Council for Local Environmental Initiatives (ICLEI)



United States Opposition

- ⦿ Concerns
 - National Sovereignty
 - Local property rights
- ⦿ National Republican Party
- ⦿ State of Alabama & Others
- ⦿ Nation Tea Party



DeWITT INITIATIVES



Restructuring
Town Government

Reorganized and Consolidated
Departments

Director of Sustainability

Boards, Commissions &
Committees

Sustainability Policy

Policy Statement 1:

Ensure Energy-Efficient and Environmentally Supportive DeWitt Town Codes, Plans and Policies

- ⦿ Comprehensive Plan
- ⦿ Zoning Code Update
 - Illegal to Export Fossil Fuel
 - Moratorium on Hydro-Fracking
 - Architectural Overlay District
 - Wetlands and Floodplain Protection
- ⦿ Climate Smart Community Pledge

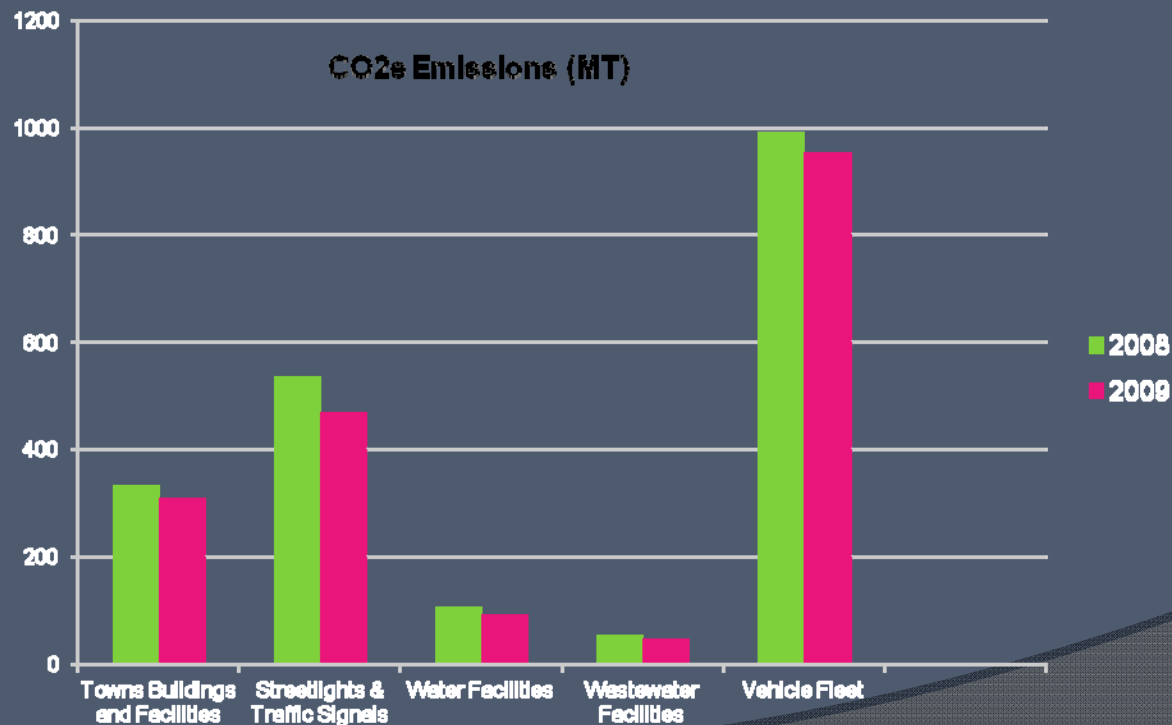
Climate Smart Communities

The ten elements of the pledge are:

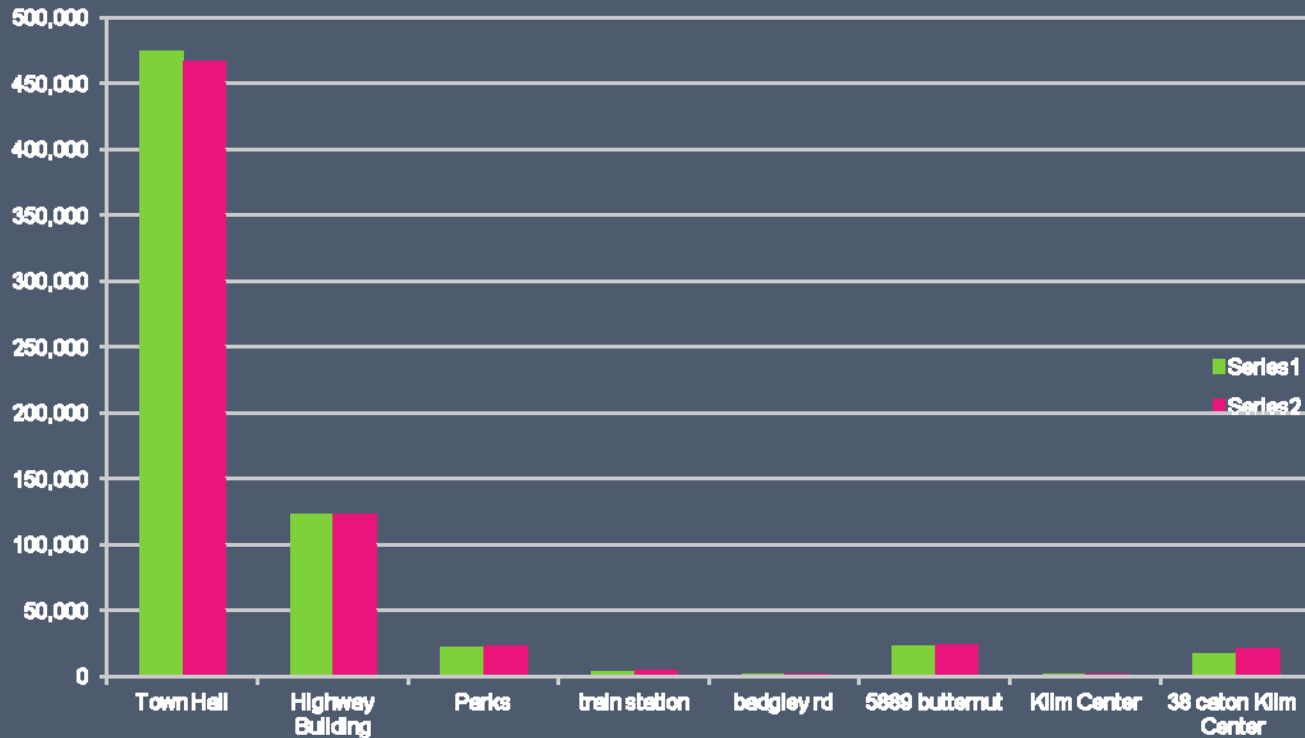
1. **Pledge to Combat Climate Change by Becoming a Climate Smart Community**
2. **Set Goals, Inventory Emissions, Move to Action**
3. **Decrease Energy Demand for Local Government Operations**
4. **Encourage Renewable Energy for Local Government Operations**
5. **Realize Benefits of Recycling and Other Climate Smart Solid Waste Management Practices**
6. **Promote Climate Protection Through Community Land Use Tools**
7. **Plan for Adaptation to Unavoidable Climate Change**
8. **Support a Green Innovation Economy**
9. **Inform and Inspire the Public**
10. **Commit to an Evolving Process**

International Council for Local Environmental Initiatives – I.C.L.E.I.

- Inventory Green House Gas (GHG) Emissions
 - Town Facilities & Town Wide
- Established Base Year at 2008



kWh Used By the Town



- Set Goals for Town Facilities and Town Wide
- Implement Reductions

Policy Statement 2:

Improve Energy Efficiency and Green Practices of Existing Town Building

⦿ Energy Audits

- Johnson Controls, Inc. (JCI)
- New York Power Authority (NYPA)
- New York State Energy Research and Development Authority (NYSERDA)
- National Grid

Policy Statement 2 - Continued

● HVAC System

- New Computer Software
- Reset Controls
(Summer & Winter Temperature Regulation)
- Duct work and Zone Modification

Annual Savings

\$2,400

\$2,280

\$ 830

Total Savings

\$5,510



Policy Statement 2 – Continued

◎ Additional Items

- Instantaneous Hot Water Heaters at Park Pavilions (Summer Only) \$463 annually
- Highway Truck Bay Controls (Heat Shuts Off When Doors Open) \$ 260 annually
- Reduced Number of Photocopiers (8 to 3), \$18,648
- Printers (33 to 10)
- and faxes (4-0)
- Low VOC Paints
- No Pesticide Use
- Green Cleaning Products (Bulk Dispensers)
- Green Procurement Policy



Policy Statement 3:

Build Very Efficient New or Renovated Buildings

◎ Town Facility Lighting

- Replace 3 T12 Watt Bulbs with 2 T8 Bulbs
- 35% Reduction In Electricity
- 144,644 lbs CO₂ Annually
- 483,840 kW Annually reduced
- T8's cost 46¢ Less than T12's
- T8's last 20% Longer
- Sensor Lighting Controls

Saved \$11,860 annually



Policy Statement 3 – Continued



◎ New Roof

- White Reflective Material
- Insulated
- 51 kW Polycrystalline Solar Panel System
- Will Supply 15% in Total Electricity
- Save \$8,187 annually

Policy Statement 4:

Educate Employees About Sustainable Practices

- Director of Sustainability
- Town Naturalist
- New Recycling & Composting Practices
- Employee Manual, Policies, Standard Operating Procedures and Practices

Policy Statement 5:

Support the Reduction of Energy Use by Homeowners, Developers, and Landlords

- ◉ Solar and Wind Law
- ◉ Light Bulb Exchange Program
- ◉ Web Page Outreach
- ◉ Educational Displays at Town Events
- ◉ Information Racks at Town Facilities



Policy Statement 6:

Reduce Dependence on Traditionally-Powered Vehicles

- ◉ Nitrogen Filled Tires
- ◉ Lightweight Vehicles
- ◉ Idle Reduction Software for Diesel Powered Trucks
- ◉ Redesign Snow Plow Routes; Lower Number of Trips
- ◉ Reduced Number of Garbage Trucks
- ◉ Larger More Efficient Lawn Mowers
- ◉ Planting Program for Town Properties and Rights-of- Way



Policy Statement 7:

Reduce Storm Water Runoff and Increase Storm Water Quality

- Created Wetland Buffer in Zoning Code
- Post-Development Runoff From 100 Year Storm \leq Predevelopment Runoff From a 10 Year Storm (Ley Creek Watershed)
- Reconstruction of Storm Water Pipes & Culverts to French Drain Systems
- Use of Porous Pavement Gutters and Low-Emissions Asphalt
- LIDAR Flyover for Watershed Elevations

Policy Statement 7 - Continues

- Engineering & Modeling of Storm Water Drainage Systems
- Planning Stages of Green Space Detention Facilities
- Feasibility Analysis of Special Drainage District
- Formulation of Public Rain Barrel and Tree Planting Programs
- Green Infrastructure Promotion and Education
- Rain Barrels and Rain Gardens at Town Parks & Facilities



Policy Statement 8:

Encourage Green Economic Development

- Andres Duany Master Plan for Jamesville
- Seeking Redevelopment and Planning Grants for Former Alpha-Portland Cement Plant
- Carrier, New Venture Gear & Bristol Myers-Squibb Redevelopment Plans
- Street Lighting Purchase and Energy Efficient Conversion
- Municipal Power Feasibility

Policy Statement 9:

Include Sustainable Land Use and Transportation Practices in Town Zoning Ordinance & Comprehensive Plan

- Created Sidewalk and Bike Lanes on Major Road Projects
- Promote the Establishment of Sidewalk and Bike Lane Special District
- Aggressive Trails, Parks and Green Space Acquisition Policy (Fiddlers Green, Butternut Park, Meadowbrook Feeder Canal, Cedar Bay Park, Walker Property, 30 Acres Along Maple Drive, Carrier Park, Norwood Park, Nottingham Gas Station, Bridge to NYS Canal)
- Established Tree Committee
- Tree Ordinance
- Tree Planting Program
- Town Forest Management Plan



Policy Statement 10:

Enhance Accessibility of Our Community to People With Disabilities

- ◉ Zoning Code Legislation (Inclusive Design & Aging In Place Accommodation)
- ◉ Zoning Board Review
- ◉ Planning Board Implementation
- ◉ Seniors Programming & Newsletter Education



THE END

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