

RESOLUTION #09-26:

**A RESOLUTION ADOPTING A STRATEGIC ENERGY PLAN
FOR THE VILLAGE OF PINEHURST, NORTH CAROLINA.**

THAT WHEREAS, the Village of Pinehurst desires to use resources in a fiscally and environmentally responsible manner while striving to insure a high quality of life for its citizens; and

WHEREAS, an Alternative Energy Committee, a sub-committee of the Conservation Commission of the Village of Pinehurst, was created to explore actions regarding energy that are efficient, environmentally friendly, and cost effective; and

WHEREAS, the Alternative Energy Commission created a Strategic Energy Plan as a segment of the League of Municipalities "Green Challenge"; and

WHEREAS, a Strategic Energy Plan will give the Village of Pinehurst and the Alternative Energy Commission direction by setting goals; and

WHEREAS, a Strategic Energy Plan is a requirement for any application for energy related grants through the Department of Energy;

NOW, THEREFORE, BE IT RESOLVED by the Village Council of the Village of Pinehurst, North Carolina, in Work Session assembled this 13th day of October, 2009:

SECTION 1. That the attached "Strategic Energy Plan for the Village of Pinehurst", is hereby adopted, said plan attached hereto as (Exhibit A).

SECTION 2. That upon adoption, said plan shall serve as the guide to improve the efficient use and conservation of energy in the Village of Pinehurst.

SECTION 3. That said plan will be consistent with the Comprehensive Long Range Plan and will be re-evaluated annually by the Alternative Energy Committee.

THIS RESOLUTION passed and adopted this 13th day of October, 2009.

(Municipal Seal)



VILLAGE OF PINEHURST
VILLAGE COUNCIL

By: _____

George P. Lane, Mayor

Attest:

Linda S. Brown
Linda S. Brown, Village Clerk

Approved as to Form: _____

Michael J. Newman
Michael J. Newman, Village Attorney

EXECUTIVE SUMMARY

The Village of Pinehurst is situated in the Sandhills of North Carolina and boasts world-renowned golf facilities and a Village Center full of New England charm. The quiet and tranquil atmosphere makes Pinehurst an excellent place to vacation and live.

The Village of Pinehurst will improve the efficient use and conservation of energy by creating, implementing, and following an effective Energy Sustainability Plan. The objective of the Plan is to use resources in a fiscally and environmentally responsible manner while striving to insure a high quality of life.

KEY ELEMENTS of the Plan that the Village hopes to achieve by 2014:

Energy Efficiency

- Install renewable energy techniques for use in government facilities; the total of purchased renewable energy and onsite produced renewable energy must equal at least 2.5% of the energy use of government facilities.
- Establish a team to be responsible for energy management of the Village.
- Reduce the carbon footprint of the Village.
- Review purchasing policies to ensure energy efficiency is included as a variable for government purchases.

Employee Incentives

- Provide employee benefits for ride sharing, walking, or biking to work.
- Adopt a policy that a minimum of 15% of the eligible workforce should participate in alternative work schedules or telecommute.

Green Building

- Register with EPA's Energy Star Challenge as an EPA partner and use their tools, or an equivalent system, to conduct a base line emissions inventory of our government facilities.
- Establish a guideline for green building for all new government buildings.
- Develop an incentive-based green building program for new construction and remodeling (residential and commercial).
- Establish a green building committee to study and develop programs.

To encourage the Village of Pinehurst to implement actions that are energy efficient, environmentally friendly, and cost effective.

Land Use

- Promote the use of permanent conservation easements on private and public property.
- Adopt land use plans that incorporate alternative energy incentives (i.e. Green Neighborhoods).

Transportation

- Adopt a “green fleet” policy that incorporates, at a minimum, the purchase of low carbon emitting, fuel efficient vehicles for vehicle fleet replacement and the use of alternative fuels in fleet operations and that considers the total usage period and costs for vehicles.
- Develop a bicycle and pedestrian plan to include a safe routes to school program (to be handled within the current Greenway/bicycle path program).

Education / Community Participation

- Develop an employee education program on policies/ practices relating to the environment and energy conservation.
- Develop and implement an education program for the local community dealing with the environment and energy.

Systems Management and Measurement

- Develop a methodology to accurately measure and analyze energy usage to include a semi-annual review of trends and costs. Key performance indicators (KPI) will be identified that clearly measures real energy progress.
- Develop a green resource guide.

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Description and Scope

The Village Strategic Energy Plan will be administered by the existing Alternative Energy Committee, a sub-committee of the Conservation Commission, made up of Pinehurst citizens, staff, and local business owners. The chairman of the committee will be appointed by the Chairman of the Conservation Commission. A Village staff member has been designated as Energy Manager to assist in administering the Plan.

The Plan will establish 5 year goals to be implemented through one year incremental supply side and demand side tactics. Annually, this document will be reviewed and evaluated. The plan should be consistent with the Comprehensive Long Range Plan.

Mission Statement

To encourage the Village of Pinehurst to implement actions that are energy efficient, environmentally friendly, and cost effective.

Village Staff

| Department | # of Staff |
|-----------------|------------|
| Council | 5 |
| Administration | 6 |
| Finance | 4 |
| Human Resources | 5 |
| Police | 30 |
| Fire | 30 |
| Public Services | 27 |
| P&R | 3 |
| Harness Track | 4 |
| Fair Barn | 5 |
| P&I | 9 |
| Engineering | 3 |
| Fleet | 3 |
| B&G | 7 |
| IT | 4 |
| Total | 145 |

***Note: Total number of FTEs = 133**

Population / Demographics

| <u>Year</u> | <u>Municipal Estimates according to US Census</u> | <u>July 2007 Municipal Estimates by NC Demographer *</u> |
|-------------|---|--|
| 1990 | 5759 | 3062 |
| 2000 | 9812 | 9729 |
| 2008 | 12,331 | 11632 |
| 2020 | ** | 17,199 |

Municipal Facilities

| Facility | Square Footage |
|-------------------|-----------------------|
| Village Hall | 21,600 |
| Fire Station 92 | 3,600 |
| Fire Station 91 | 15,800 |
| Public Services | 3,800 |
| Fair Barn | 12,000 |
| Police Department | 12,400 |

Municipal Vehicles

| Department | # of Vehicles |
|---|----------------------|
| Police | 23 |
| Parks & Recreation (Admin, Buildings & Grounds, Harness Track, and Fair Barn) | 14 |
| Public Services (Admin, Streets & Grounds, Solid Waste) | 41 |
| Administration | 1 |
| Fire | 12 |
| Building Inspections | 2 |
| Planning | 2 |
| Engineering | 2 |
| Fleet Maintenance | 2 |

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Alternative Energy Committee Roster 2009

Chairman

Larry Cox
7 Beasley Drive
215-5725
Lcox@pinehurst.net

Ray Martin
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"Energy Manager"

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Wayne Haddock
PO Box 1789
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295-5400
pinehursthomes@pinehurst.net

Energy Usage of Municipal Buildings
 July 2009

| | Electricity | | | | Gas | | | | Totals | |
|----------------|-------------|-------|-------------|--------|--------|-----------|------------|----------|-------------|-----------|
| | Kwh | Kw/SF | #BTU | BTU/SF | Therms | Therms/SF | #BTU | BTU/SF | BTU | BTU/SF |
| Village Hall | 46550 | 2.16 | 228,433,400 | 10575 | 17 | .0007 | 1,700,000 | 78.70 | 230,133,400 | 10,654.32 |
| Police | 18280 | 1.47 | 85,300,000 | 6,879 | 258 | .021 | 25,800,000 | 2,080.65 | 111,100,000 | 8,959.68 |
| Fire Stat 91 | 16200 | 1.02 | 110,548,800 | 6,997 | 83 | .005 | 8,300,000 | 525.32 | 56,278,720 | 7522.08 |
| Fire Stat 92 | 80 | .02 | 409,440 | 113.73 | 0 | 0 | 0 | 0 | 409,440 | 113.73 |
| Public Service | 3120 | .82 | 22,928,640 | 6,033 | 0 | 0 | 0 | 0 | 22,928,640 | 6,033 |
| Fair Barn | 20680 | 1.72 | 141,120,320 | 11,760 | 0 | 0 | 0 | 0 | 141,120,320 | 11,760 |

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Goals to 2014

Energy Efficiency

- Install renewable energy techniques for use in government facilities; the total of purchased renewable energy and onsite produced renewable energy must equal at least 2.5% of the energy use of government facilities.
- Establish a team to be responsible for energy management of the Village.
- Reduce the carbon footprint of the Village.
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Green Building

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- Adopt land use plans that incorporate alternative energy incentives (i.e. Green Neighborhoods).

Transportation

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- Develop a bicycle and pedestrian plan to include a safe routes to school program (to be handled within the current Greenway/bicycle path program).

Education / Community Participation

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Systems Management and Measurement

- Develop a methodology to accurately measure and analyze energy usage to include a semi-annual review of trends and costs. Key performance indicators (KPI) will be identified that clearly measures real energy progress.
- Develop a green resource guide.

Action Steps

Demand Side
 Tactics Tables Demand Side

| Past 12 months Activities | Measurement | | Savings | | Cost | Jobs | Assigned to | Funding Source |
|--|---------------------------------------|--|-----------------------------|--------|--------|------|---------------|------------------------|
| | Expected | Actual | Expected | Actual | | | | |
| Provide employee benefits for ride sharing, walking, or biking. | 3 Bike racks 1 bike | 9 racks & 1 bike | \$200 (est. trips saved) | | \$6500 | | Jay Carothers | CDPP |
| Energy audits for 3 municipal buildings | 3 buildings | 3 bldgs | \$11,000 | | \$0 | | Ray Martin | |
| Education / community participation | Participate in 4 community activities | 4 as of August | - | - | \$0 | | Larry Cox | |
| Achieve Level 1 of the NCLIM's Green Challenge | Phase 1 | Phase 1 | - | - | \$0 | | Larry Cox | |
| Conduct an educational program with Pinehurst Elementary School (Switch Plate Cover Contest) | 1 | 1 | - | - | \$0 | | Molly Russell | |
| Workshops and educational tours | 2 | 4 (Solar center, green devt, geothermal speakers, State Energy conference, grant workshops, public financing green govt) | - | - | \$1000 | | Larry Cox | Alt Energy Comm budget |
| Review Pinehurst Development Ordinance in regard to geothermal and solar panels regulations. | 1 | 1 | - | - | \$0 | | Phil Hinesley | |

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Tactics Tables Demand Side

| Next 12 months Activities | Measurement | | Savings | | Cost | Jobs | Assigned to | Funding Source |
|---|-------------------|--------|----------|--------|------|------|---|----------------|
| | Expected | Actual | Expected | Actual | | | | |
| Develop a policy to utilize energy efficient and dark sky compliant outdoor light fixtures | | | | | | | Phil Hinesley | |
| Develop an incentive-based green building program for new construction and remodeling (res and commercial). | | | | | | | Tessie Chao, Wayne Haddock, Bill Reaves | |
| Adopt a policy that a minimum of 15% of the eligible workforce should participate in alternative work schedules or telework by 2010 | | | | | | | Jay Carothers | |
| Establish a guideline for Green Building for all new government buildings. | | | | | | | Tessie Chao | |
| Establish an incentive program for Green Neighborhoods | | | | | | | Tessie Chao, Tom Campbell | Grant |
| Install renewable energy techniques for use in government facilities (i.e. Sub metering, energy management systems) | | | | | | | Ken Bonville | Grant |
| CFL Program for municipal buildings | 50 % of potential | | | | | | Ray Martin | |
| Register with EPA's Energy Star Challenge and use their tools, or an equivalent system, to conduct a base line emissions inventory of our government facilities | Registration | | | | | | Colin Morrison | |
| Establish a green building committee to study and develop programs. | | | | | | | Tessie Chao | |

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Supply Side

Tactics Tables Supply Side

| Past 12 months activities | Measurement | | Savings | | Cost | Jobs | Assigned to | Funding Source |
|---------------------------|----------------------|------------------------|----------|--------|------|------|-------------|----------------|
| | Expected | Actual | Expected | Actual | | | | |
| Review energy bills | Review all PEC bills | Reviewed all PEC bills | none | none | \$0 | - | Jeff Batton | |

| Next 12 months activities | Measurement | | Savings | | Cost | Jobs | Assigned to | Funding Source |
|--|-------------|--------|----------|--------|------|------|---------------|----------------|
| | Expected | Actual | Expected | Actual | | | | |
| Reduce carbon footprint. | | | | | | | Phil Hinesley | |
| Develop a renewable energy source (solar panels) | | | | | | | Ken Bonville | Grant |

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