Building Connecticut's Economic and Environmental Future

We all know that Connecticut faces serious economic and financial challenges. We have an opportunity, however, to move Connecticut forward, begin the process of revitalizing our economy and position the state as a vibrant leader in the 21st century.

While the path to success will involve many components, a comprehensive approach to energy, transportation and natural resource management will be critical to that progress.

The following green sector initiatives would leverage federal, state and private dollars, put Connecticut back to work, grow the economy and help make our state a competitive, clean, vibrant and top-quality place to live, work and do business:

♦ Invest in **energy efficiency** and **renewable energy** to create jobs, revive our manufacturing base, clean our air and promote economic growth by reducing energy bills for consumers, businesses and municipalities.

Job and Economic Benefit: Every million dollars invested in energy efficiency programs creates an average of 41 jobs for electric, 45 for natural gas and 48 for oil and respectively contributes $5.70, $7.00 and $7.10 to the state Gross State Product for every dollar invested. Using new program money in a way that attracts renewable energy technology manufacturers to the state would provide additional long-term benefits.

♦ Invest in creating a **21st Century transit system** to remove barriers to employment, retain and create jobs, attract and keep young workers, revive urban areas and connect communities.

Job and Economic Benefit: Every million dollars invested in mass transportation creates 35 jobs and saves workers time and money. The bulk of the jobs would be construction initially, followed with continued employment for operators, mechanics, administrative staff and new jobs created by ancillary services, etc.

♦ Fix and upgrade decaying **sewage treatment plants**, invest in new treatment technologies and **stormwater control systems** to revive our cities, protect public health, clean our water and grow our economy.

Job and Economic Benefit: Every million dollars invested in upgrading water treatment infrastructure creates at least 10 new, direct, jobs. Additionally, investments in lower cost alternatives, like green-infrastructure and LID stormwater management strategies, have the potential to grow a new industry of landscape architects, stormwater engineers, and infrastructure developers here in Connecticut. Not only do both types of investment create jobs, they support local businesses and tourism by providing the clean water needed to open beaches and shellfish beds.

♦ Invest in **habitat restoration** and **brownfield remediation** and adopt policies that support **sustainable forestry and agriculture** to create green jobs that restore, protect and sustainably utilize Connecticut's valuable natural resources.

Job and Economic Benefit: Help retain 20,000 agricultural jobs, generate more than 300 new forestry-related jobs and create additional jobs in habitat restoration and brownfield remediation.

♦ Invest in **Research & Development**, **Education** and Workforce **Training**.

Job and Economic Benefit: We have a unique opportunity to help protect more than 30% of our trade and save businesses millions of dollars in hazardous waste disposal and workers' compensation fees through the creation of a Toxics Use Reduction Institute. We also see a pressing need for training programs related to renewable energy, water management, agriculture and forestry.

American Farmland Trust • Audubon Connecticut • Clean Water Action • Connecticut Forest & Park Association • Connecticut Fund for the Environment • Connecticut League of Conservation Voters • Environment Connecticut • Environment Northeast • Northeast Energy Efficiency Council • Park River Watershed Association • Rivers Alliance of Connecticut • Save the Sound • Sierra Club, Connecticut Chapter • Solar Connecticut • The Nature Conservancy • Transit for Connecticut • Working Lands Alliance • 1000 Friends of Connecticut

Investing Smart – Maximizing Smart Growth Impact of State Spending

Goal: To direct state investment toward developments, projects, and acquisitions that reinvigorate urban centers, are proximate to transit, preserve natural resources and farms and use green building materials and techniques.

Description: Each state agency should develop a scale that incorporates the principles of smart growth into its decision-making criteria in requesting and spending state bond commission allocations.

For example, the scale would allocate more points to:

- transportation projects that lower vehicle miles travelled and reduce greenhouse gas emissions;
- economic development investments that create net new green jobs, include rail as a key supply chain component, and are proximate to rail and bus transit;
- real estate developments that clean-up brownfields in urban centers, within ½ mile of fixed route transit, within safe walking distance to major regional job centers and preserve natural resources and farms;
- and would allocate fewer points to projects that increase VMT and impinge on open space, natural resources and farmland.

The scale would apply in three scenarios:

SCENARIO 1 - Agency spending of lump sum bonding per PROGRAM

First, when exercising discretion as to how to spend lump sums that have been allocated by the bond commission to an existing program, each state agency would be required to prioritize those projects in a manner that meets smart growth principles. Existing scoring criteria for these programs would be amended to incorporate smart growth criteria. Projects that score high for consistency with smart growth should have preference for grants or low interest loans. Projects that score lower should receive less favorable market-rate loans or should be rejected altogether.

Examples:

- Brownfield Remediation
- Farmland Preservation
- Clean Water Fund
- Small Town Economic Assistance Program
- Recreation & Natural Heritage Trust
- Other?

SCENARIO 2 - Agency & Bond Commission spending per PROJECT

In this case, when an agency submits a request for financing a specific project from the State Bond Commission, OPM shall be required to apply a smart growth score for the project. The OPM, in setting the agenda, and the bond commission, in acting, should then consider the score when determining whether to allocate bond funding for such project. (This will not apply to lump sum funding, where specific projects are not identified – See Scenario 1)

SCENARIO 3 - Review of Legislative Earmarks

OPM will develop a scale incorporating smart growth criteria to rank legislatively earmarked projects. Such score will be prepared prior to a vote on the legislative earmark and disseminated to legislative leadership, mayors & first selectmen, and the committees of cognizance so they can make a fully informed decision.

♦ Invest in energy efficiency and renewable energy to create jobs, revive our manufacturing base, clean our air and promote economic growth by reducing energy bills for consumers, businesses and municipalities.

Connecticut must investigate opportunities to expand financing through leveraging of federal stimulus dollars, additional bonding, private investment and allowing for municipal property tax financing. As a first step, Connecticut should enact enabling legislation allowing municipal property tax financing for energy efficiency and renewable energy improvements to existing buildings and allow the creation of municipal bonds if cities choose to raise their own funds, allow the investment of state pension funds in secure energy efficiency projects and encourage private financial institutions to invest in energy efficiency projects.

Finally, the state should engage in innovative marketing, education and outreach efforts to ensure maximum demand for and use of increased efficiency funding opportunities.

Economic Benefits:

- Depending on the fuel, between 41 and 48 jobs are created for every $1 million invested in energy efficiency; those investments contribute an average of $6.00 to the GSP for every dollar invested. Increasing the total annual investment available for efficiency programs for all fuels to $432 million per year would result in:
    - 17,000 new jobs annually
    - $2.43 billion annual Gross State Product increase
    - 137 million tons of avoided CO2 emissions

- Solar power provides fuel-free, stably-priced energy, reduces peak energy demand and helps meet the state's mandatory global warming emission targets. Building 300 megawatts or more of new solar power would support as many as 8,000 new jobs tied to solar power over the next decade, provide stable electric bills for homeowners, businesses and municipal governments and retain existing solar industry jobs within Connecticut that are otherwise at risk of loss to neighboring states with stable solar incentives.

Policy Changes:

- Provide opportunities to increase the pool of available funding for energy efficiency projects by leveraging private, municipal and state dollars, including:
    - Providing bonding authority for municipalities to fund clean energy and energy efficiency projects in their communities
    - Allowing the investment of state pension funds in a revolving loan fund for energy efficiency improvements and insulate public investors from legal liability for considering environmental factors when investing public funds.
- Dramatically increase the amount of solar power generation serving homes, businesses and municipalities in Connecticut by enacting legislation similar to 2009's HB 6635:
    - Building 300MW or more of solar power statewide.
    - Creating sustainable long-term residential and commercial solar incentive programs
    - Supporting retention of existing and creation of new jobs in Connecticut's solar power industry.
- Create a new Farm Energy Assistance Program to provide financial and technical assistance to farms investing in energy conservation and renewable energy projects, which will create jobs in construction, engineering and contracting.

Funding:

- Solar incentives funded through existing non-taxpayer sources (utilities and clean energy funds).
- Implement Sec. 16a-3a (c) of PA 08-242 requiring utilities to invest in all cost-effective energy efficiency.
- Authorize municipalities to bond for loans directed to energy efficiency and renewable improvements.
- Invest state pension funds to finance energy efficiency investments in all fuels.
- Provide bonding to seed a revolving loan fund/loan loss reserve.
- Invest $2 million in the Farm Energy Assistance Program in FY 2011 to match federal Rural Energy Assistance Program for energy audits and installation of renewable energy and energy efficiency systems.

♦ Invest in creating a 21st Century transit system and other state projects that will remove barriers to employment, retain and create jobs, attract and keep young workers, revive urban areas and connect communities.

Public transit use reduces emissions, creates workforce opportunities, lets citizens live without cars and encourages smart growth, not sprawl. A strong public transit system provides the linkages that tie healthy communities together. Connecticut's current system leaves many towns out. By prioritizing investment in a comprehensive and integrated bus and rail system while prioritizing roadway maintenance over highway expansions, we can support economic growth and slash global warming.

Economic Benefits:

- 35,000 permanent jobs are created per billion dollars of transit infrastructure investment.
- Studies show that every $1 invested in transit can yield up to $3 in economic benefit.
- Major employers require improved transit to expand in Connecticut, and better transit would remove the single biggest barrier to employment.
- A 2008 survey showed that 77% of riders reported that new bus and shuttle services enabled them to secure their jobs, and 41% reported that without their bus service they would be unable to maintain employment.
- Improved public transit lets seniors age at home, improving their quality of life and saving the state $40,000 a year for each person.
- Eliminating one car from a household can save an average family $8000 a year.
- The New Britain/Hartford busway would generate 4800 person-years of construction and engineering activity and 100 permanent operational jobs.
- It should be noted that a New Haven-Hartford-Springfield commuter rail line will create as many as 775 jobs and produce up to $150 million in economic growth.

Policy changes:

- Create a unified ranking system across all agencies to prioritize state investment in development projects that are consistent with smart growth principles.
- Require a design and implementation schedule for multi-modal transit network that takes into account all types of bus and rail networks and the links between them.
    - Require DECD and the Connecticut Development Authority to give priority in the granting of tax credits, business incentives, loans or grants to any business that proposes to expand its operations and hire additional employees at a job site that is located on an existing bus or rail line.

- If any business with 100 or more employees working at one job site or any business planning to add 25 or more new employees at a particular site requests bus service to that location at peak times, DOT shall give priority to such a request in any plan to provide additional bus service is that transit district.

Funding:

- To the extent possible, direct investment of any needed state resources to move stimulus eligible bus and rail projects forward. Legislative approval of DOT's operating budgets is needed to hire staff and bonding approval is needed for planning, design work, etc., to get projects to the level required by the application process.

- Approval is needed for the state's share of the New Britain/Hartford busway project, which is $113 million. Federal funds will pay for the remaining 80% of the project costs. To begin work on the project, up-front funds will need to be authorized with a grant anticipation note. These funds will be reimbursed by federal money.

- $5 million increase in operating revenue for expanded bus service.

- Long term goal: Annual $5 million increase in bus operating revenue over 12 years supported by $17 million annual capital investment.

♦ Fix and upgrade decaying sewage treatment plants, invest in new treatment technologies and stormwater control systems to revive our cities, protect public health, clean our water and grow our economy.

Connecticut's Clean Water Fund is an innovative program that has enjoyed many successes, but as technology advances and environmental threats change, we should continue that tradition while developing sustainable, long-term options that will efficiently maximize water, cultural and economic benefits. The vision for healthy Connecticut waters that sustain a vibrant wildlife population, promote the local fishing and dining industry and support tourism with open and clean beaches has the added benefit of producing high quality jobs.

Economic Benefits:

- Rebuilding and enhancing wastewater treatment facilities are among the state's most productive job creation investments. It is estimated that between 10 and 100 direct and indirect jobs are created for every $1 million spent. The current level of Clean Water Fund allocations will create a minimum of 2600 jobs.

- As we invest in tools, like Stormwater Authority bonding, necessary to advance urban green infrastructure retrofits and low impact development techniques, Connecticut can position itself as a leader in the new "green gardeners" field, which is comprised of engineers, landscape architects, and skilled laborers.

- Improved water quality will: 1) grow local businesses access to sustainable fisheries and open prime state shellfish beds and 2) promote healthy tourism by maintaining open beaches; last year alone sewage and stormwater resulted in 135 lost beach days.

Policy Changes:

- Protect and begin to pay out the $265 million in Clean Water Fund allocations for FY 2010 and FY 2011 to ensure that the 2,600 high-quality jobs created by this funding are realized.

- Add flexibility to the highly successful Clean Water Fund in order to assist municipalities in dealing with the economic challenges presented by stormwater and phosphorous.

- Amend Public Act 07-154 to provide bonding authority to the stormwater authorities.

- Incentivize green infrastructure planning and project implementation and require that a certain amount of Clean Water Funds go toward green infrastructure.

Funding:

- Increase general obligation bonding in FY 2012 and FY 2013 to $110 million per year and revenue bonding to $250 million per year. This will create an additional 7,000 jobs.

♦ Invest in habitat restoration, sustainable agriculture and brownfield remediation and adopt policies that support sustainable forestry and agriculture to create green jobs that restore, protect and sustainably utilize Connecticut's valuable natural resources.

For such a small state, Connecticut boasts some of the most diverse natural landscapes of the Northeast. Smart and sustainable management as well as directed and efficient restoration are essential for the plants and wildlife which rely on these landscapes' health, as well as the many jobs in forestry, agriculture and tourism that help attract a vibrant work force.

Economic Benefits:

Sustainable forestry practices are *projected to create over 300 jobs and revenues of over $1 million to state coffers within the first two years*. The restoration of wildlife habitat, such as fish-runs, combines field work and science analysis with bricks-and-mortar construction projects that will *create local design and labor jobs and contribute to the recreational and tourism economy*. The creation of a restoration matching fund would leverage federal funding (including NOAA Community Based Restoration, the Open Rivers Initiative, and in stimulus spending), improve fish stocks, and improve water quality. Job-creation benefits include opportunities in engineering, landscaping, hydrology and specialized labor force, typically calculated at 20.3 jobs per $1 million, and construction jobs, calculated at 15.6 jobs per $1 million. This policy change would create a fund which could leverage federal funding, resulting in approximately 40 jobs per year.

To retain farm jobs, the state must make capital investments in infrastructure and management systems that will help farms remain competitive and continue to grow. *In the dairy sector there are 2,465–4,252 jobs (direct and indirect). In the horticulture sector there are at least 48,000 jobs (full time, seasonal, and part time) with a need for more.*

Policy Changes:

- Increase sustainable harvests in state forests from 3 million board feet to 9–10 million board feet per year level through
  1. An increase of 6 forest technicians and 2 foresters within DEP Forestry (phased in over 2 years); or
  2. Enabling DEP Forestry to contract with private certified foresters to enhance state forest management planning and implementation.

- Establish a Habitat Restoration Fund Account funded through license fee increases that would leverage federal NOAA Community Based Restoration investments and dedicate existing Wildlife and Greenways plate fees to wildlife and greenways projects.

- Expand eligibility and increase funding for the Farm Reinvestment Grants for building and repairing agricultural buildings and infrastructure.

Funding:

- Authorize collection of additional $15 renewal fee for Long Island Sound license plates for deposit into a newly established Habitat Restoration sub-account of the LIS Fund.

- Authorize collection of additional renewal fees for Greenway license plates for deposit into a dedicated DEP greenway account.

- Authorize collection of additional renewal fees for Wildlife license plates for deposit into a dedicated DEP wildlife account.

- Increase Environmental Assistance Fund to invest in waste management by $2 million, community farms preservation by $1.5 million and Farm Reinvestment Grants program by $750,000 by 2012.

♦ Invest in Research & Development, Education and Workforce Training.

Below are the needs and opportunities we see in research, education, and workforce training that represent areas for significant economic growth with a beneficial impact on the environment in Connecticut:

Toxic Use Reduction Institute

Create an institute modeled on the successful Toxic Use Reduction Institute in MA to foster sustainable economic development, pollution prevention and safe workplaces through green chemistry and technical assistance to businesses shifting to safer alternatives to toxic chemicals. With zero or minimal cost to the state, this concept could heavily leverage federal grant funds through the Green Chemistry Research and Development Act and similar measures moving through Congress to protect private sector jobs and help Connecticut businesses stay competitive in the global marketplace. Specific functions of the Institute shall include:

1. Researching which chemicals are important to the Connecticut economy,
2. Offering trainings for businesses regarding chemical regulations and safer alternatives planning,
3. Providing research and technical assistance around specific chemicals of concern and corresponding safer alternatives,
4. Coordinating and sharing information with Institutes in other states and the existing Interstate Chemicals Clearinghouse (§22a-902) to leverage hazard information and policy developments from other states and countries.

The Institute would help businesses save millions of dollars through reduced hazardous waste disposal and worker compensation costs, and would help companies stay globally competitive by complying with increasingly stringent chemical regulations and treaties.

Expand Training Centers

- Expand Technical High School and Community College courses and train workers in green and renewable technologies, including but not limited to green construction & renovation; heating, cooling & ventilation; building operation.

- Expand Agriculture Science & Technology Centers (formerly known as Vocational-Agriculture).

- Enhance University of Connecticut capacity to foster business innovation in natural resources management.

Need for new training programs/certification

- Green water treatment technology, including packaged water treatment systems, damless hydropower systems, remediation of water course impairment structures such as culverts, dams and bridge foundations, and unpermitted wastewater discharges.

- Alternate sewage treatment technologies, including monitoring and enforcement.

- Wastewater treatment upgrades.

- Forestry management and certification.

- Sustainable agriculture—focus on farm apprenticeships for seasonal production of field crops for human consumption.