

# Citizens' recommendations on Pennsylvania's Climate Action Plan



**The state's Climate Change Advisory Committee is developing a plan to reduce Pennsylvania's emissions of heat-trapping gases.**

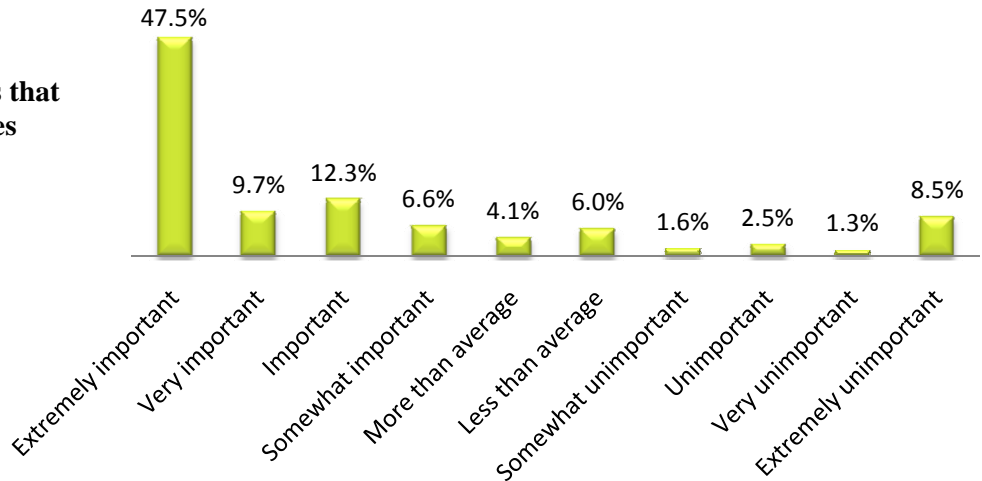
To ensure that all citizens are involved as early as possible in the process, Citizens for Pennsylvania's Future (PennFuture) is conducting an Internet survey. The survey (at <http://my.pennfuture.org/ShareYourIdeas>) began in January, with these first results reported to the Advisory Committee on February 27, 2009. PennFuture will accept survey responses and report them to the Committee until a plan is finalized.

The questionnaire lists suggestions for solutions and asks respondents to rate the importance of each suggestion on a scale of one (low) to 10 (high). Open-ended comments are also encouraged.

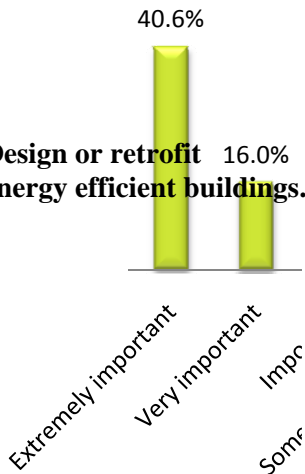
## Respondent priorities

These bar graphs illustrate the percentages of respondents who rated each choice on the questionnaire's importance rating scale. A rating of 10 equals most important and one equals least important.

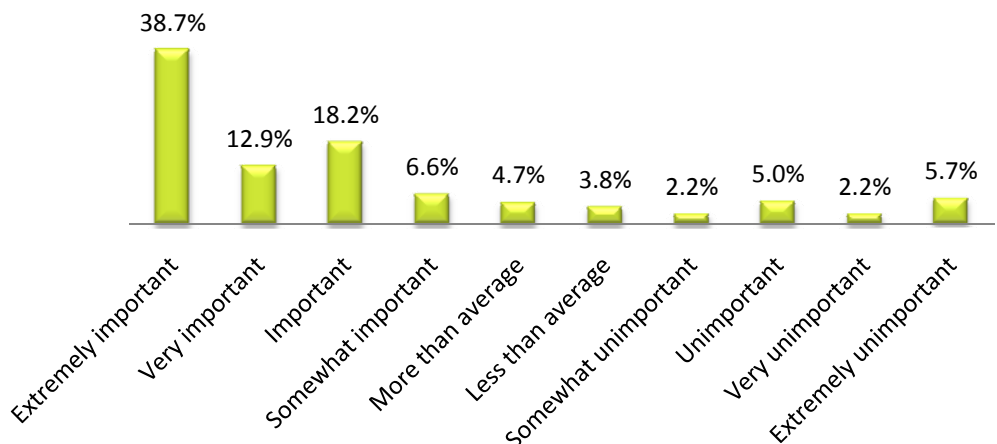
**Create and fund programs that help families and businesses install energy efficiency measures.**



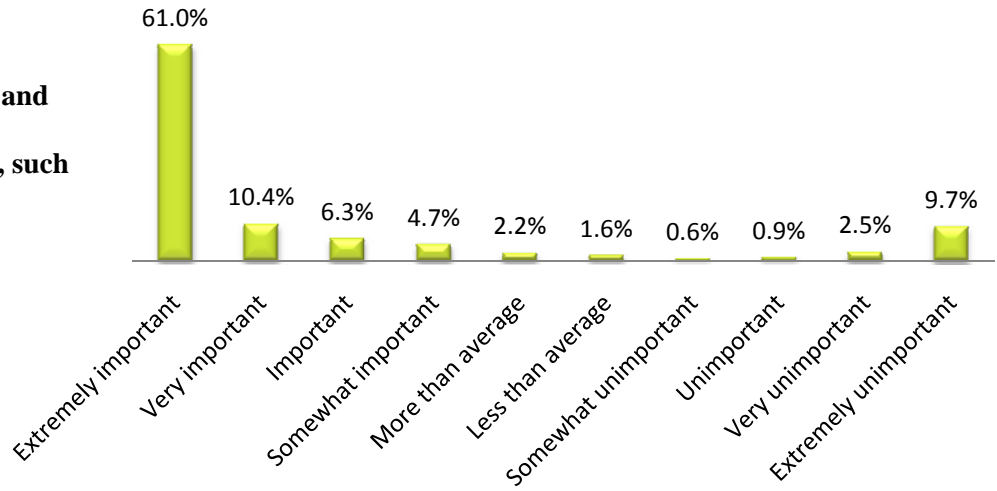
**Design or retrofit energy efficient buildings.**



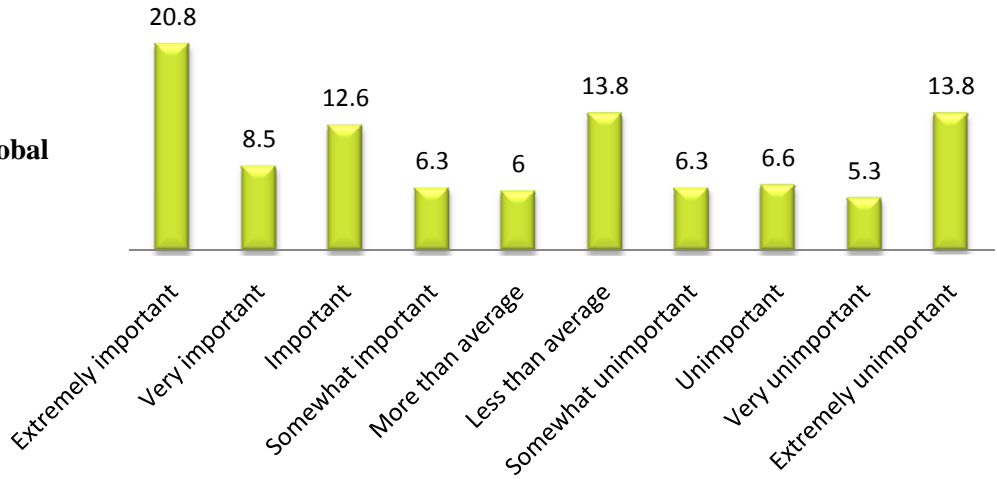
**Require appliances and equipment to meet energy efficiency standards.**



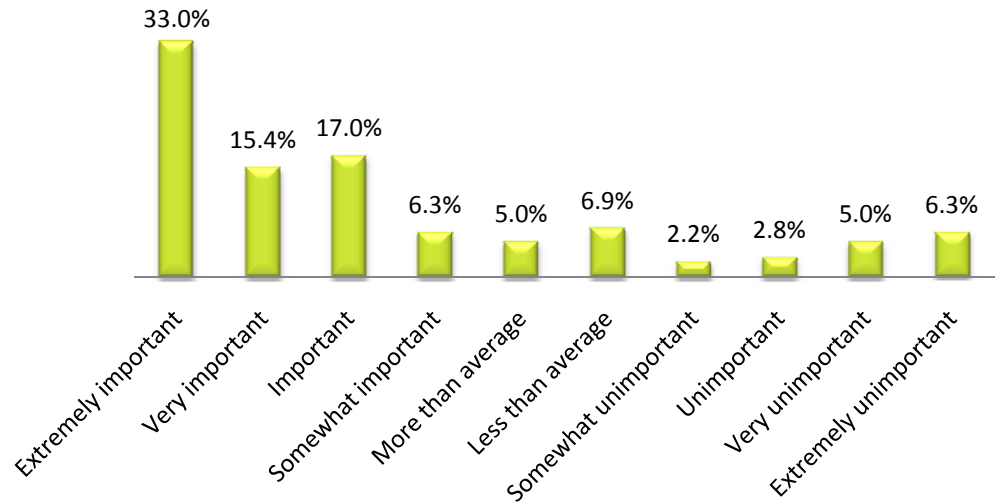
**Promote the development and use of energy made from renewable resources, such as the sun and wind.**



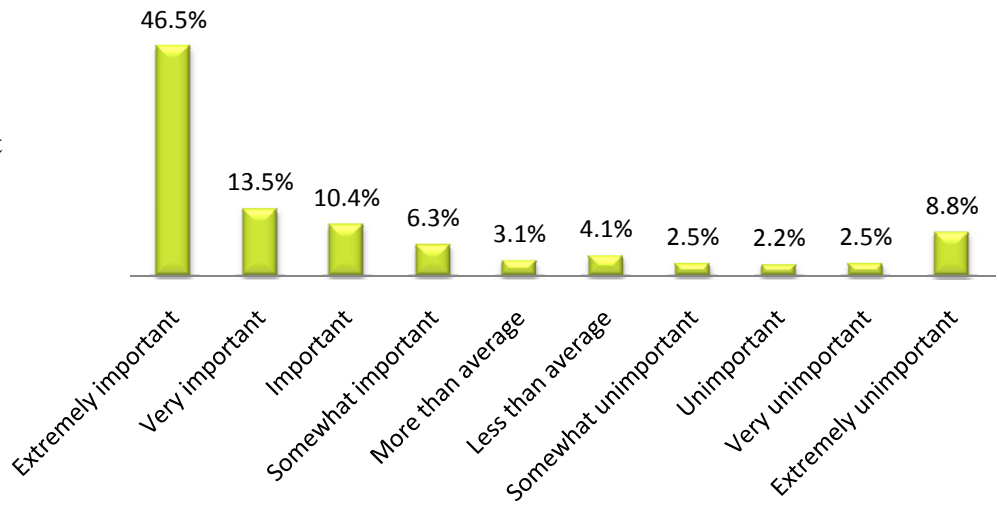
**Fund programs that help coal- and oil-fired power plants to control global warming pollution.**



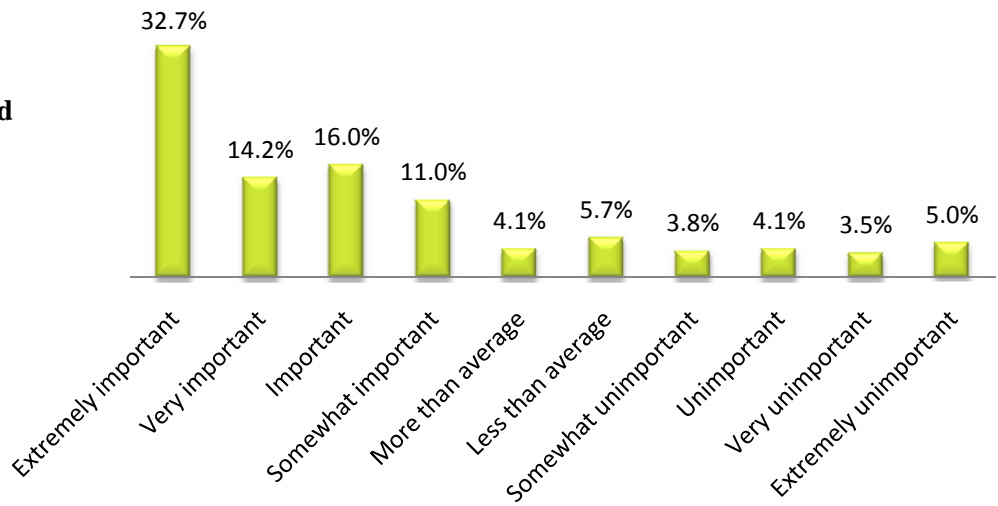
**Fund programs that help industry capture and reuse wasted energy.**



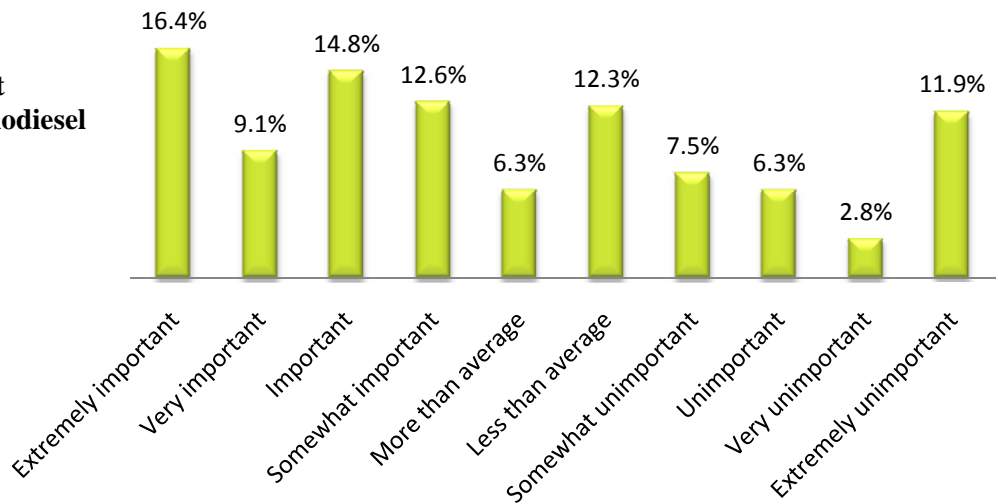
**Build convenient, efficient public transit systems.**



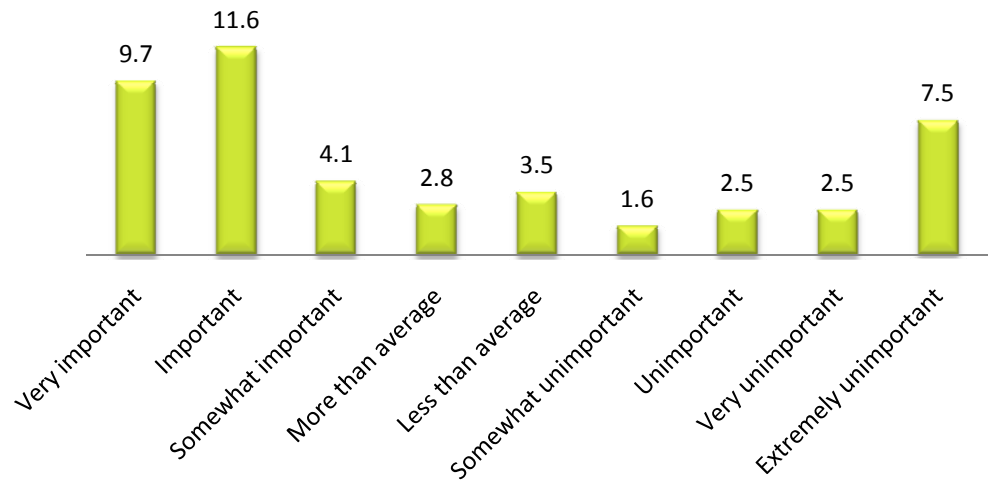
**Encourage residential and commercial development in areas served by public transit systems.**



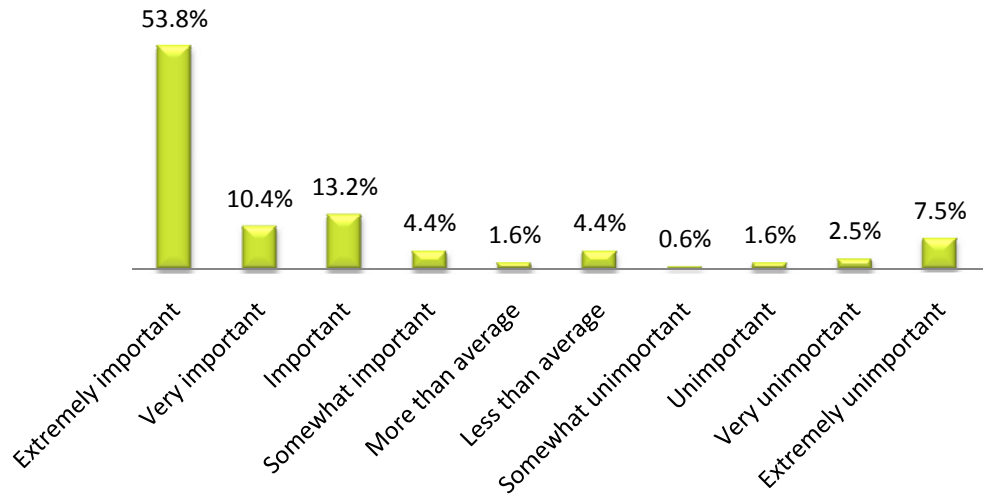
**Promote the development of alternative fuels like biodiesel and ethanol made from forest and agricultural waste.**



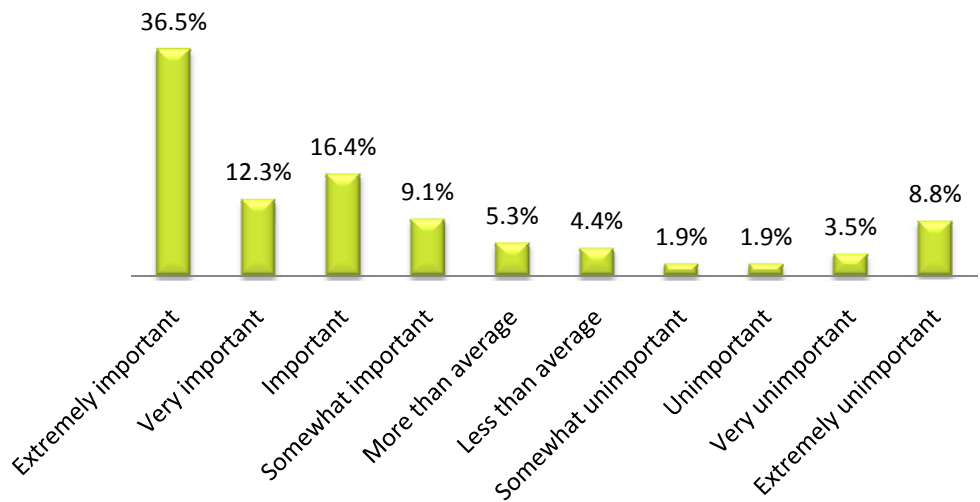
**Build more fuel-efficient vehicles.**



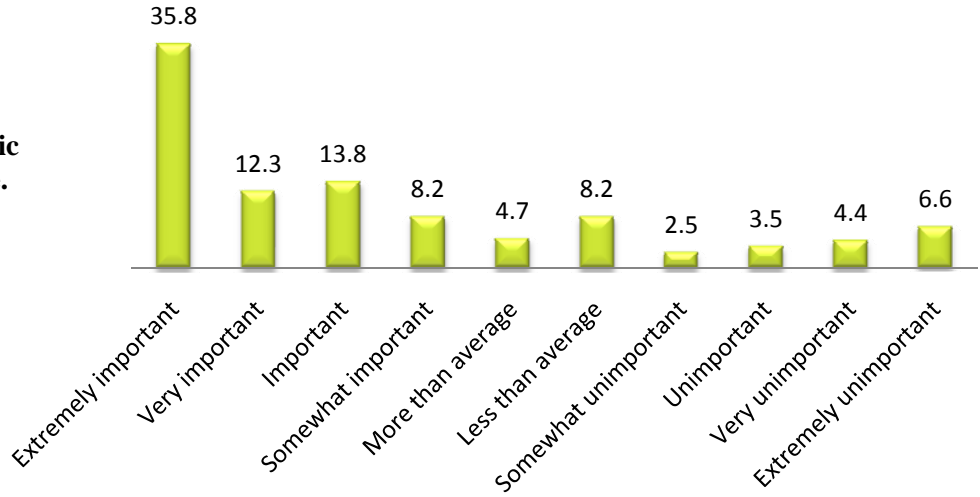
**Protect existing forests.**



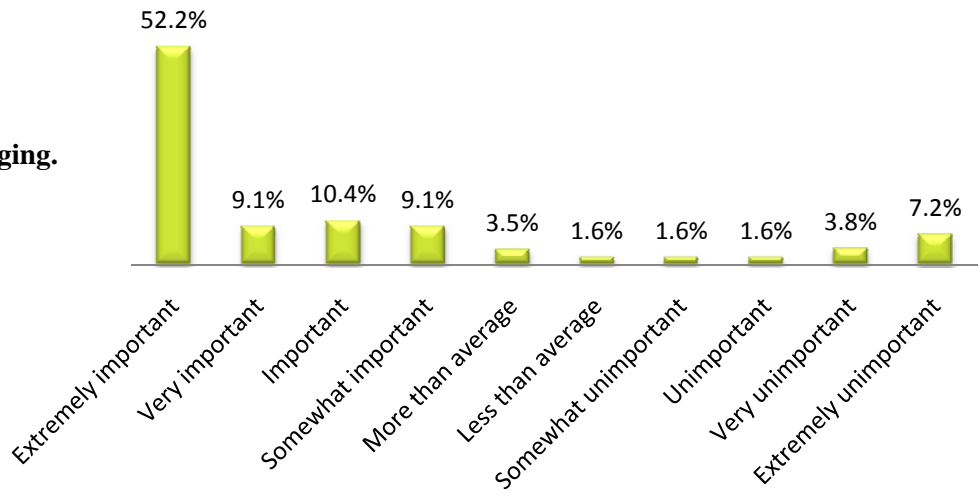
**Manage forests so that growing trees capture global warming pollution.**



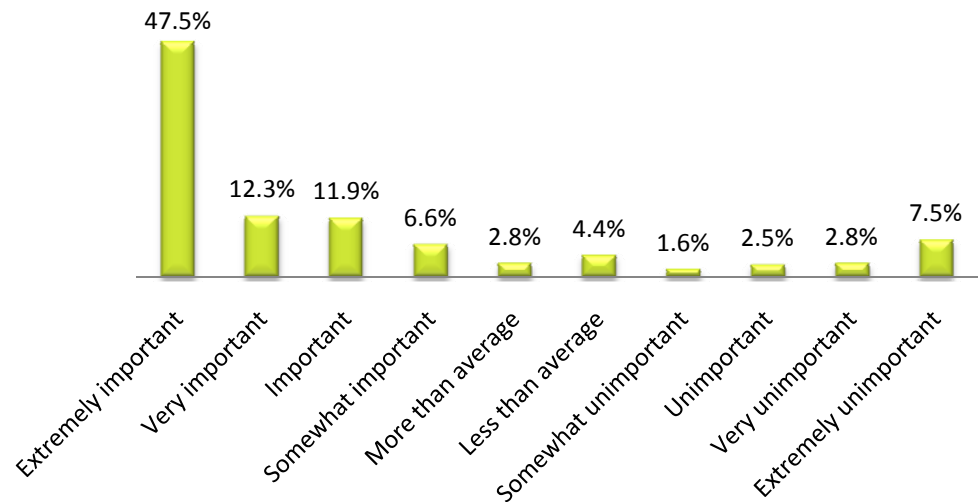
**Provide funding to farmers who want to move to organic and sustainable agriculture.**



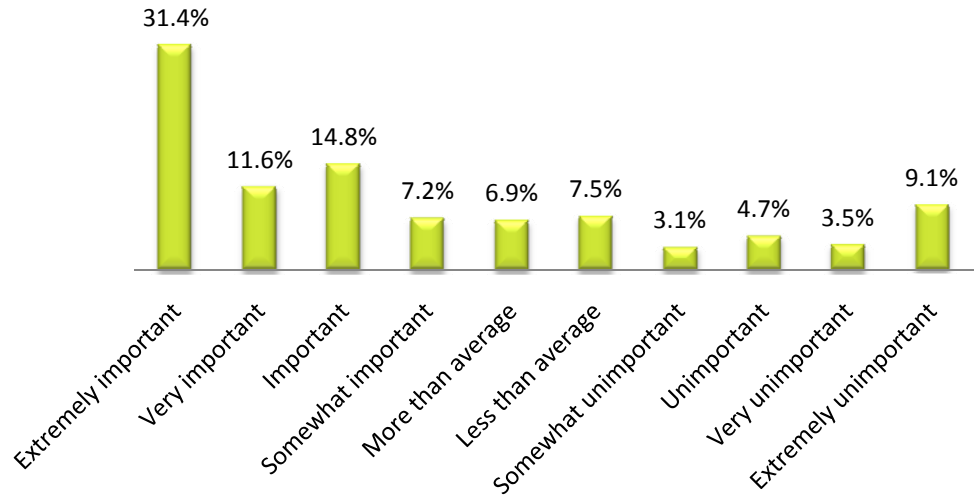
**Reduce unnecessary packaging.**



**Expand recycling.**



**Fund programs to help waste facilities generate electricity.**



## Open ended comments from citizens

These comments to PennFuture survey are unedited, except for contributor names and words that might be considered offensive.

### Submissions received on January 13, 2009

- Definitely keep creating programs that financially help SMALL businesses become more energy efficient and find ways to incentivize using local sources.
- Private forest landowners provide a positive impact on the environment and carbon released into the atmosphere yet they get very little assistance or incentives to practice Sustainability and sound forest management.
- How can our work at the state level workers be modeling responsible eco-behavior? working from home, biking/walking capital hill folks, more "virtual" meetings, paperless meetings, etc.
- Don't bother with clean coal. "Clean Coal" is an oxymoron.
- Set state level codes for building efficiency. Require state approvals for new developments. Make all counties submit a county development plan for approval - idea is to limit sprawl and create sensible development plans. Encourage new homes and retrofits to use Gas appliances, over electricity appliances where possible - they have much better TEE (total energy efficiency) and GHG ratings.
- Require higher fuel efficiency regulations in automobiles sold AND LICENSED in PA. Enact legislation to reduce pollution from Diesel Engines. Provide incentives for corporate car and trucking fleets operating in PA to move to hybrid or Electric vehicles. Provide Grants to PA Universities to build commercially viable hydrogen vehicles
- Greater targeted tax rebates to home and Businesses. Target tax rebates to the most effective measures like insulation and air sealing, NOT windows or doors. The Gov't should phase out the manufacturing of old style, 70% efficient boilers, furnaces and water heaters. All appliances should be Energy Star for efficiency, this is heaters, washers, refrig's, tv's, computers and lighting. This technology exists and there's no reason it can't be used. Educating and redesigning for efficiency is in business and home owners best interest. We should expand energy retrofit work to all sectors of the economy. Thanks for this Survey! Please continue to ask for input from the public.
- There should be financial penalties for businesses that do not comply with new energy policies.
- Protect the water supply. Increase water potability. Purify and recycle grey water into the drinking system. Limit sprawl and encourage home- grown sustainability in the food sector. Tax gasoline appropriately as a way to fund infrastructure improvements. Protect The Chesapeake Bay by controlling farm run-off Thanks for the opportunity to speak-out.
- My answer to # 7 only relates to addressing the issue with current plants. I do not endorse new coal plants. Clean coal is an oxymoron. There is cleaner coal, but no clean coal, especially when extraction is factored in.
- Require all communities to recycle. No exemptions because of size of the population.
- our economy in western Pa. is dependent on coal and natural gas production. coal gassification with Co2 entrapment is reasonable. gas fired electric plants are reasonable as are new nuclear plants(ask Westinghouse) selling carbon credits is a bad idea which is sure to finish off the economy. Solar and wind power are OK ,but for peak power only. Please do some scientific research and you will find that most scientists do not believe there is global warming
- KEEP GOVERNMENT OUT OF THE BUSINESS'S BUSINESS BUILD NUCLEAR POWER PLANTS BUILD NUCLEAR POWER PLANTS
- Not sure but keep on keepin on!

- Re-examine public lighting. Do we need street lights along urban stretches of highways? Is the spacing between street lights maximized considering the newest lights.
- Reduce the human population. Provide incentives (e.g., tax) for smaller families.
- Educate the public on the importance of these measures for our future. If possible, provide incentives for the public to cooperate.
- Begin a massive education campaign about these issues. There is so much confusion created by the media most people don't know what the truth is and don't know what can be done. These should be done on all levels.
- Encourage the public to use less energy. For instance, drying clothes on a rack or clothes line, walking more, etc.
- I think Dr. Hansen of NASA Goddard institute has it right saying that a national carbon tax levied at the source, combined with a 100% dividend paid back to the citizenry is needed. Anything short of that will not constitute an adequate solution. This goes beyond a state issue, but Penn Future might be able to team up with other environmental organizations to promote this. All the other stuff above is nice, and better than nothing, but if we seriously want to address the problem, we need the carbon tax. And we need the 100% dividend to sell the tax concept.
- Ask police, fire and volunteer ambulance services to review the necessity of having their engines idle, especially outside of medical facilities. Taxi cabs at train stations are also offenders.
- Support and promote passage of a national zero emission vehicle mandate - or at least reinstate the California national zero emission vehicle mandate so we can follow their lead! We want EVs!!!
- Demand response programs and solar subsidies need to be more extensive to encourage participation and compliance. Keep up the good work.
- As wonderful as it is to ask citizens what they think about how we should rate these solutions, it doesn't matter what a teacher in Media, PA (me) thinks at all. So many of the problems in Washington, DC stem from people focusing on the politics of solutions rather than consulting the experts who research the problems and potential solutions. Please consult only leading environmental experts to rate these solutions. To me, they ALL seem necessary. Of course we need fuel efficient vehicles, energy efficient appliances, and forest protection, but we can't afford to employ ALL solutions. Ask the scientists where we should start. Employ the scientists to explain this problem to the public, so that we can all change our way of life. I do not mean to sound unappreciative of your work. I am a huge fan, and I thank you for your wonderful hard work and dedication.
- There's not enough room in those questions to flesh out my idea of a coal free goal. The idea would be to invest in alternative forms of power and in energy efficiency so that our power needs are reduced (and that's a problem if we're going to opt for more high-speed electric rail). There are those who believe there is such a thing as clean coal. So far that's not been proven possible and it's certainly not been proven economic. Investing in clean coal takes money away from what is proven and on the cusp of being economically viable. Finally, waste-to-energy systems are a scam. It takes more energy to run them than the energy you get out of them and they are proven GHG emitters. Nice to see some leadership starting here. Keep it going.
- Reduce the paper used for advertisements by stores. These ads are always in the Sunday papers and are such a waste of wood products. Stores should find other ways to advertise, or at least not have as many ads, once a week should be sufficient. The auto industry should have built more fuel efficient autos many years ago. Also, the housing industry should cut down on the size of homes, windows in the homes and the large bathtubs and showers and the number of these tubs and showers in a house. In other words homes should be more energy efficient.



- State administered population control must be the foundation of any and all environmental reforms. No environmental betterment is possible without a significant lowering of the planet's population. Population is pollution. Children are not a private right but a public burden. Each person on earth makes 6 pounds of garbage every day. Your child is my butcher, baker, rapist, serial murderer. Mother Earth surpassed her optimal human population level more than 2 thousand years ago.
- Eliminate direct and indirect subsidies for families with > 2 children, FREE birth control measures, teach realistic sex-education in the schools (not just abstinence only). Promote zoning regulations for both new and retrofitted housing to reduce sprawl, reduce need for cars, more bike- and pedestrian-friendly development. Require all new housing to be clustered, energy efficient, cooperative.
- any mandatory programs (e.g. energy efficiency standards, rather than voluntary assistance program) will have far greater impacts...
- do away with caf's
- Green roof and other incentives to reduce urban heat island effect. Make sure that school buses stop idling, because school buses are supposed to keep our kids safe but instead they are endangering our children's future with higher CO2 emissions. More hybrid public transportation - like buses, which are both part of the solution and part of the problem when they are spewing so much pollution into the air. Do something about the methane from agriculture - hopefully someone else has a program PA could follow.
- Effective water budgeting would be helpful. I feel water quantity issues are often overlooked but will grow more and more great as climate change advances. Right now, Act 220 for water budgeting has no teeth and is voluntary. PADEP has no adequate way to track how much water is being withdrawn in the state among all users and, worse yet, has no way to enact any type of enforcement to control this issue. I fear that if we don't get a good handle on water quantity issues, along with the issues proposed to be acted on above, as climate change happens our water resources will diminish greatly. The wars fought over oil will be nothing compared to ones we'll fight over water. We should be protecting this resource like no other.
- Help schools to teach all children to value our earth resources and to choose simple ways to live. There must be changes in how particularly U.S. population lives so that the rest of the world can also live. This begins with young children and parents.
- Stop treating solar thermal energy as a second class solution thru unfair and unequal tax credit policy. Promote educational training and certification for installers.
- Simply put, from this day forward focus should be on development and efficient production of energy efficient products, cars and homes. Energy conservation and waste reduction should be high priorities. Find cheaper ways to reuse all that is now wasted. We have energy all around us in the form of wind, water and sun. Use them.
- Get to it right away, regardless of available funding!
- Remove the and / or option in the energy code that allows for design to be implemented instead of testing building from meeting guidelines of air infiltration by blower door test and having insulation values minimums Plus increase conventional insulation standards comparing performance results to reflective films and spray foam applications that seal and insulate.
- 1-Insulation & solar panels are too costly for homeowners w/o industry growth and consumer subsidy. 6&7: Make it so expensive to power companies to use coal/gas that they have to convert to alternatives. 9-11-12: Americans hate the bus. We want our cars to be efficient, so put the \$ there. 14-15: Also other biosystems and water. 16-17: No money for bad farming, just money for good farming. And stop the fat increases in cost of milk. W.VA. milk costs @ \$1/gal less than in Pa! #21: At every point of consumer purchase, from convenience stores to McDonalds to Walmart, there should be recycling containers for the items and packaging sold there. Other states have this. Why

don't we? #22. A: Outlaw non-biodegradable styrofoam and non-biodegradable plastic bags. B: Mandate recycling by businesses.

- Work collaboratively with all of the engineering schools in the state to come up with creative solutions to our problems. Encourage and support entrepreneurship. No more status quo decision making. Our health and the future well being of our world are dependent on our actions and planning now. Our priorities must go green!
- The legislation has passed. Now, it is imperative that the funds allotted are spent efficiently. I fear the money will primarily be spent on more State employees who get their jobs via nepotism or politics, and their subsequent inefficiency is protected by their union. Hiring this way leads to employees who are not effective or passionate in their positions and negates the intention of the legislation, decreasing global warming pollutants.
- #20 only if waste facilities don't generate CO<sub>2</sub>. Other ideas: We should be rank ordering these items by accurate assessments of CO<sub>2</sub> produced per year and then rank them 1,2,3 etc. I don't have good data on who produces the most CO<sub>2</sub>, but I think it is the coal companies followed by inefficient buildings and then transportation. My number 1 suggestion is to mandate that all new cars sold in Pennsylvania get a minimum of 50 mpg by 2012 and 100 mpg by 2020. Smaller engines, more aerodynamic, lighter cars are the future. Also, we should consider expanding our rail systems for both passenger and freight.
- Promote US gov recommendations 9 -12 servings of fruits and vege per day. Make people keep their roof water on their land. Insulate every building in PA. Educate homeowners about greening their homes. Show them how to do an energy audit. Retrofit interior of most of our homes built to be leaky due to earlier heat systems like wood stoves. Encourage use of solar thermal for space heat using large tanks and radiant heating under floors. Encourage use of solar thermal for large capacity water users like apartments, industry and Laundromats. Mandate that new houses be green designed, taking south orientation, overhangs, insulation, etc., into account and stop building with designs from the Victorian era. Encourage redesign of electric grid system (Smart). Educate, educate, educate the citizens, we cannot rely on the politicians, they have destroyed all civilization since time began.
- Fund community wind farms and install solar panels on all state buildings.
- As you can see, my answers are based on a proactive response first with things that can be done and/or put into legislation that will lessen the greatness of the things we need to have a reactive response with...
- Provide additional incentives for home-based renewal resources such as geothermal and solar.
- Do not spend lots of money on correcting very outdated coal and oil fired electric plants, just convert them to some other use or mothball them.
- Put strict regulations on the outside woodburning boilers/stoves that emit toxins in the air causing pollution and air quality issues. When you live within 100 feet from one of these contraptions, it is very unlivable. The stench and pollution one of these causes is unbearable. Actually it would be great if these were outlawed.
- We have miles and miles of highways that can be fitted with solar panels that are interconnected for miles. Those solar panels can provide most of the energy that we consume. The cost is extremely high initially but over the years it would pay for itself. It would give power companies a sustainable future and also give us a clean renewable power without consuming any more usable acreage. Not to mention it would give the State access to renewable rental funds from power companies. the same ideology could be used for wind power also.
- Many, many rural areas of Pennsylvania do not have recycling available. And, if there is it happens at limited times throughout the month. Many residents continue to burn their plastic, which is just terrible. I think recycling needs to come to every community in Pa. And, it should be mandatory that all trash pick up companies must offer recycle at the curb.

- Pennsylvania and America as a whole can put itself back to work and put a serious dent in global warming by building modernized passenger rail transportation. Initially, it may not be anything more than reclaiming existing railroad beds, but eventually, monies should be spent on creating safe, high-speed trains and networks that can operate at a much lower cost and burn much less fuel than gas guzzling jumbo jets.
- get people to care
- I strongly believe that the citizens of Pa and the US want to do their part but have not really been asked. In WW II, people readily grew vegetables, saved metals, rubber etc for the "good of all". I think people respond when asked. In 1973, folks were asked not downplay their Christmas lighting, cut down on gasoline consumption, and we all readily did our parts. Somehow, it needs to be made to feel "patriotic" to conserve and to go without, and to be part of a bigger cause. With the Bush admin, we were encouraged to BUY and use credit and add to our consumption. How can we make people see that they are "doing the right thing"
- Promote the "easiest" least costly things first and work up the list; almost everyone can change their lightbulbs to compact fluorescents. We should insulate our homes to the highest R value feasible. Check doors and windows for drafts.
- Reward municipalities that facilitate pedestrian and bicycle friendly, mixed use communities. Rethink how we fund our public schools. Cities will continually struggle to be desirable places for families if schools depend mainly on property tax for revenue. In turn, reinvesting in our cities will more efficiently use those resources dedicated to infrastructure, as current suburbia uses a disproportionate amount of resources per capita. In addition, it makes more economic sense to fund public transportation in more densely populated areas.
- I think that the expansion of the port of Philadelphia and the dredging of the Delaware River will do great things to facilitate shipment by water and reduce the wasteful shipment that occurs by truck between this area and northern New Jersey. Further the development of our inland shipping infrastructure could further help remove trucks from our highways and reduce wasteful overland transport.
- There is plenty of information available about global warming and what we can do to slow/stop it. Please take any measures you can to make Pennsylvania (and its inhabitants) more sustainable. Thank you!
- Consider a state-wide bag tax on plastic and paper bags from all retailers. Not only will this tax raise funds that can be applied to environmental issues, but it will reduce consumption. Many large retailers\* are already moving towards bag reduction, and Ireland saw a 90% reduction in bag consumption\*\* when they introduced a county-wide bag tax. \* Ikea in 2007 introduced a five cent per bag fee, and in 2008 Whole Foods Market discontinued plastic bags. \*\* <http://www.reusablebags.com/facts.php?id=20>
- Upgrade building code to require LEED level structure in new buildings. Tax credits for geothermal HVAC, solar hot water, sunlight storing devices (e.g. Trombe wall, phase change crystals). Encourage energy conscious site planning (e.g. deciduous trees south of structures; minimize north windows; encourage trees, moss & flower gardens instead of lawn). Encourage family planning via tax deductions because each additional person uses more energy & resources; Allow \$10,000/year for 1st child, \$4000 for second and none for additional children. Without a moderation in population growth, all the other efforts will not stop earth's problems from worsening.
- every home should use the earth's natural heat to heat and cool them. 3 feet under the ground the earth is 56 degrees yr round. Stop building homes on slabs and make every home have a basement!!!
- We should tax fossil fuels and reduce taxes on projects that will yield long term environmental improvements.
- Do not subsidize renewables. Instead, end the subsidies for roads, fossil-fuels, and sprawl: e.g. no PA kids allowed to fight in oil wars, carbon tax on fossil-fuels to pay for climate disruption, drainage problems, parking, congestion, etc.

- we have to incentivise homeowners to generate green electricity as they do in some European countries by paying them 3 times more per KWh than PECO charges and by providing funding to install systems
- Tax energy use above 600KW per month.
- I would like to suggest that the most cost effective economic stimulus plan would be to invest in conserving energy. First, take steps to reduce demand. (Weatherization, fuel efficient transportation, rails, telecommute). Second, tax credits for geoexchange heat pumps and other high efficiency HVAC. Third, wind and solar This would help in 4 major ways: 1. Create jobs 2. Put more disposable income in the consumer's pocket 3. Reduce the flow of dollars out of the country. 4. Give us more time to find viable alternative sources of en
- Increase efficiency standards for all homes and buildings. Provide subsidies for rooftop PV systems until PV reaches grid parity. Build the price for pollution into the cost of products. Carbon Tax, etc. Increase gasoline tax to help fund renewable energy
- In the larger sense of your question, why is PA the nation's third largest producer of heat-trapping gases?? The specific culprits are not identified in your newsletter. What industries, practices are contributing? Once citizens and lawmakers are educated about the causes, ideas about solutions will be easier to generate. More specific to Phila., I think that Septa is a poorly run, overpriced bus & train company holding the city hostage to it's awful service. Phila. needs a lower-cost-per-ticket, modern (ie. auto-ticket machines, turnstyles) extensive light rail system, like San Francisco's BART that reaches the suburbs where people work. Explore re-instating the streetcars that once criss-crossed the city. Improve the city's recycling program. And where do the recyclables go? I wonder (and I'm not alone) if the recyclables just end up in the dump with the rest of the garbage. Educate people about the cycle of recycling! Encourage urban gardening!
- Make public transportation a viable option with expanded subway and trolley routes in Philly. Also, efforts need to be made to create a more bike friendly city. And trees!!! Please, can we get some trees planted in South Philadelphia neighborhoods. Most importantly, make it easier for the communities to get involved and volunteer time towards these efforts. This is key to any future success.
- Earthship n. 1. Passive solar home made of natural and recycled materials 2. Thermal mass construction for temperature stabilization. 3. Renewable energy & integrated water systems make the Earthship an off-grid home with little to no utility bills. Bioteecture n. 1. The profession of designing buildings and environments with consideration for their sustainability. 2. A combination of biology and architecture. LoveLovingLove Inc is trying to bring this technology Philadelphia.
- Small changes in policy can cause change without mandates. By using land-value-taxation, sprawl would be discouraged. Only when car-based land development is made less attractive will funding for public transit be graded positively by Pennsylvanians. Wind energy outside of the midwest cannot provide a significant amount of energy for the state. Better to encourage the development and construction of new nuclear plants. In the coming years, PA can then be a hub of nuclear engineering for the rest of the country. Additionally there are several nuclear plant components for which there are only a few suppliers. By encouraging a home-grown nuclear power industry, PA firms can compete in these largely untapped markets.
- Encourage the state government to purchase fuel efficient vehicles for nearly every vehicle they use (with exceptions for law enforcement vehicles). Promote government policies that measure true costs of goods and services. At least the difference between the true cost and market pricing can be spotlighted. Model a greenhouse gas control plan, like the Kyoto Protocol, that reduces greenhouse gas emissions with hard dates.
- Contributors that are too frequently kept out of the public circuit result from industry. Fishing boats, farm equipment, and hauling diesel trucks severely increase our per capita footprint. Huge issue...changing their standards means huge impact!

## Submissions received on January 14, 2009

- Ban any new or expanded concentrated animal feeding operations in Pennsylvania Expand vegetarian choices on school menus. Teach energy and water conservation and reduction of waste and why they are important in public school science classes. Young people are huge consumers of disposable plastics.
- Provide as many incentives as possible for individual homeowners and consumers to become more energy efficient and waste conscious. Tax incentives and EASY grid access for small elec producers. Promote re-usables. Collect deposits on containers - at least then, when folks litter, the clutter WILL be picked up and recovered by someone. Require PennDOT to build and maintain sufficiently wide and clean shoulders that bicycle commuting is an option. Similarly require the construction of sidewalks to access suburban shopping centers and malls.
- Behavior modification is the least expensive, and most difficult, action we can promote to curb global warming. Consider it a challenge.
- Any plan must take into consideration the idea of population control and reduction. The earth cannot continue to support our current population much less the higher population numbers for which we are on target. A reduction in human numbers will solve a myriad of problems.
- Areas 4, 13 and 19 are very important but cannot be addressed effectively at the state level, which is why I rated their importance low. Area 7 -- the phony quest for clean coal -- should receive no attention at the state level. Or any other level. Areas 10 and 11 are long-term projects that are not of immediate importance. Areas 15 and 16 should be funded at current levels. Area 20 is a non-starter given the current economy, in which the market for recycled materials has tanked.
- What has worked for me and gets best response is to approach energy waste and lack of conservation measures primarily as matters of fiscal responsibility. This avoids distracting contentious arguments over environmental and peak oil issues. Eliminate and mine the 50-75% of energy use that's wasted by inefficiency and lack of conservation. By the time that's well under way there will be better data and proceed with other measures.
- I noticed in the Benchmarking Schools Workplan a suggestion to Implement Energy Star benchmarking for all public school buildings by 2010. Why Energy Star? There are already programs in place via PDE's Plancon for LEED-Silver certification incentives. I recommend that you work with the program already in place, or perhaps modify it to encourage (or mandate) LEED basic certification. There are more resources available for LEED vs Energy Star.
- 1 - Hydrogen fuel/fuel cell technology for homes and vehicles. Pittsburgh had the first gas station. Let it have the first hydrogen station. 2 - Focus on retrofitting old buildings with efficiency standards -- LEED Gold. All new building needs to meet LEED Gold minimum! 3 - Marketing campaign to teach how we can be green as citizens. Build a market of informed citizens so that investing in renewable technology becomes a prized market investment.
- Mandate recycling centers near every major population center and fund enterprises that reuse and produce new products from the recycled material. It will create jobs and make local recycling of paper plastic and glass, electronics much more profitable.
- 22. Companies should be responsible for their products. They should pay for recycling / reclamation costs. Stop externalizing costs onto the rest of society. 23. REDUCE, REUSE, and THEN recycle. 24. Encourage a change to a more healthy lifestyle, particularly vis-a-vis diets. The omnivorous American diet is responsible for approx. 18% of all GHG emissions, says the UN Food Program - that's more than all forms of transportation combined. Encourage vegetarianism / veganism, or at least reduced consumption of animal products. 25. Dismantle the growth machine. We can't grow forever. That's obvious. Let's DEVELOP, i.e., make better what we have already. E.g.: according to the US Census, PA has approx. 677,000 excess housing units (using 2000/2006 data). Seems pretty straightforward, then, that we should stop building homes, and work on renovating the ones we already have instead.

- \*Introduce mandatory metropolitan land-use planning in place of fragmentary, competitive planning by individual municipalities. \*Establish no-new-development green zones around recognized metropolitan areas, wide enough to effectively stop suburban sprawl.
- Gas hog tax. Any new vehicle that gets below a minimum mileage should be taxed for each mile of inefficiency. Commuter tax. Any person who commutes by single person occupied car should be taxed for not using mass transit. Re-develop the North-East rail corridor. Our trains (Amtrak) need complete overhauls. I cite France's train system as an example for us to follow.
- Animal agriculture accounts for more greenhouse gases than all transportation combined, depletes our land and the world's rainforests, and pollutes our water. Please refocus efforts on reducing animal agriculture and factory farming by putting more emphasis on promoting vegetarian and vegan diets.
- Reduce subsidies to highways, expand subsidy to rail. Corn ethanol is horrid idea: converts food to pollution. Community and regional currencies intensify local manufacture and trade, reducing fuel costs. [ithacahours.com](http://ithacahours.com) Plant orchards in vacant city lots to reduce fuel costs: urban land reform. Shift from consumer economy to creative economy: organic food, arts and preventive healing. Shift economic power to neighborhoods: [cnt.org](http://cnt.org) Require R70 in new and renovated construction, as in Germany. See: Underground Housing, by Malcolm Wells
- #21 The highest priority, carbon neutral and community benefit (heating electricity etc.) Methane recapture on landfills is becoming more and more profitable but methane capture in sewage treatment is lagging. Also incentives to promote alternate fuels in off road equipment. Tax credits for alternate fuel use may be called for. Lastly tax benefits for businesses involved in providing environmental improvement projects. Creating better business prospects for environmental rehabilitation and protection allows the market to multiply the effects of various other funding sources.
- Grow hemp since it can be used for energy and materials. It is also healthy for the human body.
- Funding renewable energy is important, please do not consider nuclear energy as a renewable source, but to consider small hydro. Promote a national program to address climate change. State-only and regional programs are ineffective. Promote a national program on renewable portfolio standards. Promote demand side management programs in the state, as well as anti-idling laws.
- Adopt incentives and dictates that moves zoning in PA toward smart growth principles. See, for example, CA SB 375.
- We are trying to cling to the past with its unlimited supply of "free" energy. We cannot continue to do this. You won't change anything until you change the way money works. The fact that interest is charged tacitly assumes that infinite growth on a finite planet is possible. It is NOT! Until the way money works is changed we WILL categorically be doomed to failure. Downsizing everything is the only way out of this mess. Two hundred years ago the word "consumer" ranked with the word "f\*\*\*" in connotation. We MUST go back to that mind set. However, if you want to play the game: Provide education programs to people to teach them how to grow food in their own back yards. Also, require all new building owners, from home owners to big industry, to attend a course on passive solar building BEFORE plans are established to build. Most new building is not done with solar energy in mind. Require the state law makers to READ "A Pattern Language... Towns Buildings Construction" by Christopher Alexander et al. Require state law makers to READ the Hirsch Report. as created by request by the US Dept of Energy & published in Feb of 2005.
- Start examining the long term effects of our planning. It is idiotic to support "clean-coal" or farm grown fuel in this climate as they are resource negative everywhere and more so here. Just putting anything in place other than what we have is not good long-term planning. We just plain need to move beyond liquid fuels which have been obsolete for about 1/2 century and think much further into the future for our children. If we support research and demand accountability we will create not only jobs but efficiency and our dollars will be well spent.

- Promote local/individual efforts to reduce stormwater runoff. Support "green" lawn programs. Promote the idea of zero discharge of waste from sites.
- It's too late to stop climate change, we can only soften the blow. The stresses caused along with pop. growth along with the host of interrelated eco crises along with peak oil will require a brand new civilization. Permaculture is the best bet. It will provide means of survival, provide a holistic framework to make choices, plans, decisions that are successful and provide high levels of ecosystem function in our built environments.
- You are just wasting everyone's time unless you are willing to address human population growth. Per capita human damage is utterly meaningless and it's all you want to address. If someone happens to read this, I urge to find any job that will at least accomplish something.
- Encourage people to walk or bike instead of driving. Increase funds for sidewalks and transportation trails. Encourage "no idling" policies.
- Put a 10% luxury tax on items (the sale of boats, fur coats, expensive jewelry, perfumes, etc as well as licenses for vehicles that get less than 20 mpg) that are not fuel efficient to fund these programs. It would be a sin to evenly tax those who conserve energy with those who waste. Advertise on TV, Smokey the Bear style, to encourage people to raise their own food -- victory gardens; and to eat locally. Supply schools with LED lights and energy-efficient heating/air conditioning. Fund geo-thermal projects. If all the counties in the state get together on this, we should be able to buy solar, geothermal, wind, replacement windows, insulation, energy-efficient lighting, appliances, etc in bulk and save a bundle.

#### **Submissions received on January 15, 2009**

- Expanding recycling is a big one locally. Too many recyclable materials end up in the landfill because we do not have collection centers locally that include those materials. If people do not have easy access to facilities to recycle they won't bother. Many people who do have easy access to facilities still DON'T recycle. My development is within blocks of a drop off center; but come garbage day I cannot count the endless piles of cardboard boxes etc. that sit at the curb waiting for the garbage man. So maybe another suggestion would be to require local haulers to pick up more of the recyclables (currently our hauler is only required to pick up plastics, aluminum, and glass). Eliminating waste wherever possible-especially in the manufacturing process. Additionally in packaging; get rid of those plastic bubbles and other waste found in your packages. Assisting regular homeowners (via grants) with the implementation of things like solar panels, or wind turbines etc. I would love to place solar panels on my roof and utilize that power to provide electricity in my home. However, just providing my family the basic daily needs and paying our monthly expenses; on a very limited income does not allow for such purchases or endeavors; regardless of the savings down the road. Another idea may be to host neighborhood champions/examples aka someone who would be willing to implement energy saving products at their home (solar panels, solar heating unit, smart meters, green insulation, etc.) in exchange for opening up their home and sharing the information with neighbors and community members a certain number of times a year. Additionally, that person could track the energy savings over a particular time period and present the findings and promote the products, etc. Eliminate the use of plastic bags. However, if retailers provide alternatives (for a fee), require that they be made from recycled, sustainable materials in an environmentally friendly manufacturing process. No cheap, petroleum based bags made in China please. Provide discounts/rebates to homeowners who keep their electric usage below a minimum set point or average. Particularly during peak hours.
- PA has the opportunity to be the role model for enhancing solar and recycling technologies while improving the environment and the economy: Reward builders for advancing energy efficient communities. Restrict use of waivers to stormwater ordinances. Create the most efficient recycling program: Drives technological advancements; expands raw material resources; creates jobs; decreases waste disposal demands in landfills and incinerators.
- address urban myths about pointlessness of recycling (it all ends up in the landfill anyways. etc/). create positive incentives for positive behavior.

- Nothing has been mentioned in this survey concerning education. If future generations are to carry out the plans we institute today (and to develop new plans in the future), we need to make funds available at the K-12 and post-secondary levels for schools to educate students about sustainability, global warming, and other environmental issues.
- I would like to see funding for reducing greenhouse gases caused by farming meat animals. Farm animals produce methane and nitrous oxide via digestion and these green house gases are substantially more harmful than CO2. The public should be educated about this so that a public discourse can be started. For more info see the most recent issue of Audubon magazine for the article on low-carbon diets.
- Provide grants for Energy Audits of residential buildings. Go beyond weatherization of the exterior of building by including upgrading the insulation values and sealing the buildings from infiltration.
- People need to look at the whole picture when it comes to government funding of initiative in the economic or cultural realms. We need to keep government out of subsidizing anyone's pet projects and limit it's work to providing for equal access, equal rights, and some social safety nets and let the creative people in the economic and cultural realms do what they best know how to do- including finding the most energy efficient ways to conduct our human affairs. For example, if the government had not in the first place subsidized so much of the current highway system, we would not have the wasteful transportation system we have today.
- We need to help our communities "go local" so as to reduce transportation, go small and more efficient,. People could generate their own electricity, heat and hot water from solar power captured on their roofs. Define your goals and strategies. The Devil is in the details. For example, Pennsylvania means Penn's Woods. As a Tree Farm owner, I learned how best to manage my woods: for timber, for fuel, for wildlife and biodiversity, for watershed protection (I'm in the Chesapeake Bay watershed), to protect my soils and ensure my chosen way of life. I will resist any intrusion into my ability to make management decisions based on my enlightened self interest. I could comment extensively about each of your other questions... Regarding waste management : Nowhere do I find the choice of shrinking our material economy by simply reversing our trend toward disposables and planned obsolescence. We need systemic changes to survive. Our present economy and sense of economic development must be turned upside down. To achieve climate change we must go back to hand tools, to growing much of our food within 5 miles of where it is consumed. Forget ATVs and other toys. Forget labor saving devices. Forget "economic development." Go with green jobs, growing food for ourselves and our neighbors. Go with cottage industries for essentials, using our homes as our schools, churches, factories and infirmaries as much as possible. Radical? You bet. But radical brainstorming may lead to some modicum of change in direction. The one we're going in isn't working, for Pennsylvania or America or the world.

### **Submissions received on January 16, 2009**

- treat SUVs as cars, not trucks- sales tax & reg. fees linked to engine displacement and fuel economy- uniform bumper height- higher fines for polluters- school programs to teach good energy and resources management.
- Phase in an eventually heavy carbon tax over the next 5 - 10 years, cap and trade until the tax is fully implemented, level the playing field, tax what we wish to disincentivize (coal, oil), provide tax credits for what we want to see ... solar and wind energy to replace foreign sources of oil in the near term and all oil, gas, and coal in the long term, supplemented by the gamut of renewable and sustainable energy sources ... and slow global warming by keeping CO2 to under 350 ppm. Build no new nuclear or coal-fired facilities ... and eventually systematically, as possible, shut down existing plants. Invest in clean coal technology development research (and once and for all prove that it is a poor solution ... retraining coal industry workers in green collar jobs) and use MUCH less energy (efficiency and non-use when possible ... and there is a lot of room to reduce energy use) and ... voila ... we have a solution. We'll see if this gets done or if the lobbies are stronger than the will of the American people and the incoming administration



### Submissions received on January 18, 2009

- Prioritization Allocation of resources Careful training of management team Lots of networking opportunities
- Gas taxes: Most of the dialogue on this topic uses the price of \$4.00 per gallon as the level at which consumers will change their behavior and drive less or demand fuel efficient vehicles and public transportation. Related issue: Instead of leasing the turnpike (because road infrastructure is a legitimate role for government), we should raise revenue by increasing gasoline taxes at the pump. 2. Decoupling of electricity generation from power company revenues. 3. Mandate the electricity bill show the source(s) of the kwh. Enable consumers to choose non-coal power. 4. Mandate that thermostats be set at higher temperatures in the summer. Maybe we can stop freezing in malls and restaurants. 5. Is there really "clean coal"? Is this an oxymoron? 6. Find out how France reprocesses nuclear waste onsite at the plant for reuse.
- We need to STOP doing what creates waste & pollution and promote things that protect our environment & sustain our well-being, including the well-being of animals, plants, and forests. We should wean ourselves away from oil and coal, stop mountain-top removal and other extraction means which poison our environment. We need to create new transportation means that do not pollute. We need to encourage everyone to think in terms of eliminating waste & taking care of our mother earth and all the living things that share this planet with us.
- Enforce energy codes, update the code and building inspectors with building science information, demonstrate deep energy reductions in existing homes 1 in each county with min. 70% usage reduction, reward certification of contractors and home builders, use performance criteria for evaluation of savings, create a state-wide consumer information campaign for effective usage reduction measures, require energy audits and retrofits at time of sale, allow for on-bill payments for usage reduction measures, standardize protocols for energy efficiency improvements, subsidize training courses leading to certification for RESNET, BPI, and LEED, create a discount purchase program for contractors to purchase diagnostic equipment, avoid rebates
- The EPA states that "Landfills are the single largest human source of methane emissions in the United States." According to Biocycle December 2008, the Northeast has 154 MSW landfills. PA ranks number 1 with 48. Another astounding statistic is that PA imports 7.2 million tons per year of waste while exporting only 600,000 tons. Northampton County has 3 landfills, one of which is non-compliant. With these statistics, how can we be surprised that PA is the nation's third largest producer of heat-trapping gases?

### Submissions received on January 19, 2009

- emphasis on alternative energy resources. Bio-fuels can use up too much natural sources such as corn. The price of corn could jump way out of proportion.
- Penalize energy wasters through financial punishment
- Please have curbside recycling pick up (esp. rural / small towns). Please have businesses (i.e. Sheetz, Wal-Mart, etc.) recycle and have recycling bins available for customers. To help collect / use more solar energy, the government should (fund or) have solar panels placed on businesses / office buildings' roofs. Also, open parking lots could be covered and have solar panels on it. In Southwest PA, there are several strip malls (i.e. Target, Wal-Mart, Lowe's, etc.) and customers have to drive to each store because the distance is not walk-able (or safe). Exhaust from cars and solar rays being reflected off of parking lots' black top are contributing to global warming. Also, the covered parking lots would provide protection from the elements (i.e. rain, snow, etc.). Make strip malls reclaim land (i.e. Foundry in Washington, PA). Mining companies have to reclaim land. Why are new strip malls / malls being built and leaving the old malls unused / not used to their full capacity? The nation will be changing after Obama's inauguration tomorrow. I suggest that PA be a part of Obama's Energy Plan (i.e. create millions of new green jobs, etc.). Organizations, such as Affordable Comfort, Inc., are already training persons for "green" jobs (which should improve country's energy usage). PA needs to connect with whom (i.e. companies, programs, etc.) the government will be funding for the President's energy plan. This will ensure and strengthen our state's future.

### **Submissions received on January 20, 2009**

- Reductions in energy and resource waste and increases in efficiency will be far more effective measures than finding new fossil energy sources.

### **Submissions received on January 21, 2009**

- Promote the use of led lights instead of cfls. Leds are more energy efficient. Get the state to convert all stop lights to leds.
- PPL and other electric suppliers should charge a higher rate to customers who use more electricity. Customers who use very little should be charged a lower rate. Reward conservation!!!

### **Submissions received on January 22, 2009**

- Based upon the P2E2 grant program it has been my experience that few are willing to make the commitment when the DEP is the source. Funding from DEP via a 3rd party non-profit would increase participation greatly and alter my response to many of those questions.
- I suppose choices have to be made among these options but almost everything on the list needs done and soon.
- Pennsylvania is home to the premier nuclear power company in the world - Westinghouse. Get behind and support more non-greenhouse-gas-generating nuclear power. The rest of the developed world is. You can push for all the waste disposal solutions you want, but quit knocking it as not being an acceptable source of power.
- Renewable forms of clean energy cannot be mandated. It must be market driven. When it is economically viable to produce energy from sustainable renewable sources like our vast well managed Pa. Forest it will happen. Taxing and mandates are artificial methods. The answer is right under our nose but the general public doesn't understand how our Forest system works. Wind energy on mountain tops where the forest does not grow well is also a good option.
- Work with Homeowners/business to create natural landscapes replacing lawns with plants that require less mowing
- strict standards on coal mining operations and plants, ban on any new nuclear plants. bans on drilling/mining, etc. in environmentally sensitive areas
- Promote local food (pref. organic...take advantage of Rodale in Easton) Make it easy for institutions (schools, hospitals, etc. & businesses to compost food waste if not using to generate energy. (When I was small garbage and trash were separate and farmers came once a week to collect garbage for use. Small surcharge on util bills to create fund for solar installations and on water utils for providing rain barrels w/ installation kits.
- I wanted to see if you would be interested in a technology that exists and has been implemented for years to provide savings on customer's utility bills and at the same time can significantly reduce emissions for electric power generating plants. Very briefly: Reactive power or VARS are required by loads. These VARS are also critical in voltage control and grid reliability. FERC urged RTO's to review reactive power standards after the 2003 blackout. I do not believe that anything substantial has been done since. (ie. swept under rug). Larger Wind farms require Mega VARS to operate. VARS compete for bandwidth on transmission lines with VA's or Watts adding congestion to already overburdened systems. VARS do not travel well. Losses are much greater than kWh losses. VARS are presently being produced by electric generating plants. If the amount of VARS produced by these plants can be reduced then there will be a reduction in emissions from these plants. These emissions reductions can be substantial, and in fact can be orders of magnitude greater than emissions reductions garnered from AEPS and PA ACT 129 combined. Problem is that concept is difficult to explain, therefore is allowed to remain unresolved. Also PJM does not want anyone messing with their voltage control mechanism. There is presently very limited incentive for end users to correct power factor to limit the amount of VARS produced by the grid system. VARS can be produced at the point where they are needed - at the loads though power factor correction technologies that produce zero emissions at very reasonable costs. I believe that your organization can help rev ivate the reactive power issue that FERC among others has been urging for years. Look forward to your response. You can call me as well.

- Provide training at the local level for alternative energy, building and conservation. design regulations that require new buildings to be energy efficient. encourage innovation.
- Care must be taken when developing plans for alternative fuel production to ensure that environmental damages are minimal and will not cause a new, equally devastating set of problems. All programs must be accompanied by an intense, multi-aged, public info/educational component so that the public becomes part of the effort.
- Enact law protecting ALL riparian buffer areas. Minimum width of 35' on existing development & properties. NEW development should require 100' width. NO exclusions! Having required riparian buffers along every stream in PA would designate enough land to sequester carbon dioxide for global warming and protect the ground and surface water supply.
- Look at Lake Erie wave motion; Encourage more hydro -generation capacity by PPL at Holtwood; Wood chip fuel promotion: in addition to forest "waste," utilize marginal quality farm land by growing hybrid poplars and mechanically harvesting every 3 years, no replanting necessary
- greater incentives to purchase hybrid or electric vehicles increase the use of trains to move goods. This will reduce the number of gas and diesel pollution from large trucks. state sponsored solar and wind programs for residential housing
- Make plastic grocery bags illegal and supply/ encourage re-usable bags. (Reduces waste that may be incinerated-contributing to global warming) The production of the bags requires petroleum. Encourage car-pooling and ride-sharing programs among co-workers. Turn down thermostats- wear more wool sweaters. Buy locally grown food. It hasn't been trucked across the country.
- I would beware of showering the majority of funding on powerful incumbent s technologies such as (euphemistically named) clean coal. Our programs have a history of subsidizing old incumbent technologies. e.g. Denmark & Germany subsidized the development of new wind & solar technologies while we subsidized 1000 yr old technology-the distillation of alcohol from fermented grain.
- an attempt at making these concerns part of integral awareness of a wholistic lives being lived out -- for example : an awareness of the total "footprint" rather than one's own personal use of energy (i.e., the whole picture of what is happening and what could happen) -- ALSO more affirmation for those who already have some awareness and care about the earth, thank you for the opportunity to fill out this survey and the chance to put a comment here -- ps -- more activities like the PA RENEWABLE ENERGY FAIR would help, too
- support and build local org/sust. agriculture thru positive incentives and help protect such practices for future security. Reduce packaging by implementing neg incentives to manufacturers. greater need for public education foster more educational programs regarding energy/environmental issues.
- All great ideas, but I would prioritize energy efficiency and public transit. Thanks, and good luck.
- Require government buildings to be the models of efficiency (i.e., reduce levels of heating/cooling, weather-proof, plant green roofs, etc.).
- No new coal ("clean coal" is a myth) or nuclear plants. Promote new industries that would collect pieces like broken furniture, items that can be used if fixed. Thus creating new jobs and reducing trash landfills. There is a city that has done this (I can't recall the name) where there is a place that items can be brought. There are plenty of abandoned factories in Philadelphia that could be places for this industry of fixing fixable items. And the city could pay people to pick up reusable refixable items on the street.

- all of the above are wonderful. I think it's key for the state to be more vocal on these issues and to consider fresh ideas. for example, portions at restaurants are often unnecessarily large. can we encourage restaurants to trim portions? if everything (portions) were cut by 10%, this would be less wasted food, less wasted packaging, less trash, fewer calories consumed, etc etc. And this seems much easier than building a new mass transit system. (i'm all for mass transit, but it ain't happening here.) We need people that make recommendations to the biggest consumers of energy. i see parking lots with many lights shining all night. is that really necessary? can they just light half of them? (keep the place safe, but use less energy). also, how about selling clean-energy bonds? we have to make this a patriotic effort. we sold war bonds for WWII (or so i hear - i was about 30 years from being born). also, now that the housing boom is finally over, is there anything we can do to prevent more sprawl when the next boom happens? make the farms clean up their runoff. cleaner fertilizers, etc. get people to collect rain-water for watering plants, etc. and many more... thanks
- Focus should be improvement of efficiency and reduction, while selling waste. Then retrofitting and new technologies.
- Promote renewed infrastructure which facilitates commuting by bike or foot.
- Offer tax incentives to homeowners for installing new fixtures such as solar panels and tankless water heaters.
- While only part of the problem, tougher, wider, consistent, and more enforced vehicle idling prohibition laws. Currently, I believe only diesel trucks, school buses are required to stop idling in Pgh and Philly (and maybe elsewhere), but we have numerous tour buses, passenger vehicles, Greyhound busses, courier service, etc. which continue to idle.
- Along all of the above please don't forget the wildlife that depend on our wise choices.
- Look into adding a solar generation farm and/or look to harnessing some hydroelectric power from our rivers or from the waves on Lake Erie.
- Give both State and Federal tax deductions to homeowners that plant trees on their property. 2. People are lazy these days and that is why some people still do not recycle all that they could. Why not provide both a State and Federal tax deduction for taxpayers that weigh and record their recycling. This could be done easily using a simple scale that most people own to watch their own weight.
- Creating incentives/develop programs for the following: CSAs, Streambank Restoration, Constructed Wetlands/Wetland Restoration, An equivalent to LEED certification w/out the lofty price tag but with PA State recognition & benefits to developers/contractors that participate, Develop micro-hydro programs as an alternative energy source.
- Incentive programs-- tax abatement, preferred contractors, grants, low interest loans for people who want to improve the energy efficiency of their homes and/or keep them well-maintained.
- Encourage more demand-side management with time-of-day pricing of electricity.
- That's way too much already!
- Do not use food crops to produce fuel. Promote cellulose fermentation research to produce a sustainable biofuel.
- It would be included under item #2 (above), but we'd like to see the state require that electric companies make available "smart electric meters" to homes and businesses much more quickly than they presently plan to do so.
- I have 1/3 acre of south facing slope just waiting for affordable solar.

- Find a way to change the Oil & Gas Act. It allows this industry to pollute the air and water. I am surrounded by natural gas wells and compression stations now. They have destroyed everything around us. Our water is a mess. The air smells of diesel. And the noise is constant. There has to be better ways to regulate the industry!!! Our future depends on it!!!
- Parking lots should be taxed at least twice the rate of the surrounding real estate. Also, any undeveloped urban property should be taxed higher than developed property unless a community garden or orchard is planted on it. Finally, state government should be proactive in helping towns and cities create car-free zones.
- abolish the PA income tax and raise the revenue to support all the above activities to reduce global warming with a tax on the annual rental value of land (locations).
- Make recycling programs mandatory statewide. Make residential and business participation mandatory. Many businesses get out of participating in recycling even in municipalities where it is required for residents. This is unfair when business generates more trash! Promote breastfeeding which reduces the amount of formula containers in landfills and the fossil fuels used to produce the formula. PA could be a leader as a breast-feeding friendly employer. It would also be very helpful if the state passed laws protecting breast-feeding mothers right to feed their babies when out in public. (If you are out with a child for more than an hour, you really need to breastfeed them). Many states already have such a law.
- Setting ambitious standards requiring high energy efficiency, the use of locally produced, recycled content materials for buildings and day to day products will benefit Pennsylvania in the long run whereas the coal industry will undoubtedly fail PA in the long run. Many colleges and universities, have hired Sustainability Coordinators (like myself at Allegheny College) to examine our habits and self regulate our impacts. Collaborate with these schools and individuals since they are already working on climate action plans and may have unique understandings of strategies, opportunities and successes.
- Strengthen the PA Munic Planning Code to enable more wise management of development to reduce traffic levels. Enact a PA Severance Tax on Oil and Natural Gas extraction to fund planning, environmental restoration, energy conservation and carbon sequestration in tandem with CB Trib Strategy compliance.
- make whatever it is visible. do not pussy-foot around with those who oppose. paint the fn capital green if you have to. the steps taken now need to seep into the culture as soon as possible. they need to become the backdrop upon which we live our lives.
- Use American heroes to encourage public to: use the "off" switch, turn down the thermostat in winter turn up the thermostat in summer, set water heater at 115 degrees, purchase only gas efficient cars, etc.
- Tax credits/rebates for PPAs. Municipal/Regional Power Authorities. Programs that shift towards distributed power generation. Improved grid technology. Fund "recycling" research for "obsolete" solar panels.
- As mentioned above, provide a consistent source of state funding for the Forest Legacy Program, similar to the state agricultural preservation program Most forested land in PA is privately owned and federal funding is too competitive. We have lots of forest land we could permanently protect in Adams County if we had a source of funding we could apply to. We also need safe bicycle lanes on our highways, similar to those I've seen in Canada. Also, we are working on a micro-hydro project here in Adams County that may be replicable.
- All economic development should be done by capitalizing on green - green manufacturing, green buildings, green supply chains, green education, green hospitals and healthcare, green agriculture - let PA become the east coast hub for green. This also ties into all the wonderful outdoor rec and ecotourism that already exists in PA with its State parks, Forests and game lands - "Our deer eat organically grown corn!" - haha! Seriously, PA has enough public lands to support the entire strategy. and by the way, question 16 is silly - can you manage growing forests that don't capture CO2?? Thanks for doing this survey - truly appreciate your efforts!

- Work on making recycling a way of life. Start off by making it convenient, so that it get to the point where no one would ever throw out something which they could recycle.
- create an energy quota for each residence and business in Pennsylvania. Reward buildings that go under the quota. Tax buildings that go over.
- It is imperative that we reduce our consumption in every way, reuse what we can, and that we recycle our materials. Help us!!!

### **Submissions received on January 23, 2009**

- Help residents and businesses with the costs of installing solar panels and/or wind turbines and require power companies (including small providers such as the boroughs and cooperatives) to credit power sent back to the grid by those solar panels and wind turbines. I know I gave a lot of 10s but they are all important. Thank you.
- Please take a look at an article on my website <http://home.windstream.net/bsundquist1> Then click on the title containing the words "terra preta" in it. Then go to Section [11] near the bottom of the article where there is an analysis of the various strategies for halting global warming. I think I have made a fairly bullet-proof case for my contention that all the usual strategies for halting global warming, individually or in total, have virtually zero chance of halting the really serious, life-and-death, effects of global warming (what I call the "big-ticket" costs of global warming). This is not to say that nothing should be done. There is way too much at stake. What I do say, however, is that there is a strategy for halting and reversing global warming which has a high probability of success - at low cost and with a major beneficial side effect. The details of this strategy are described in detail in the remainder of the terra preta article. If you have any questions or comments, please contact me.
- planning & zoning: encourage planning that combines multi-use, resources within walking distance and street planning that encourages walking.
- encourage a "buy locally" economy to foster community and save on the energy used to transport goods.
- programs directed to low-income communities about recycling, global warming and energy efficiency with emphasis on how it is important to them as well
- Provide support for more community gardens
- Educate the public with facts and concrete suggestions on how to reduce carbon footprint; make it a campaign to get everyone on board. Make them understand the critical need to connect our current wasteful lifestyle with the future poor outcomes for their children and grandchildren and the extinction of other species on the planet.
- We need to wean ourselves from coal (I know that there are economic implications). However, without diversifying the energy sources, increasing efficiency, and major conservation efforts, we will still be pumping greenhouse gases into the atmosphere at unsustainable levels.
- Support increased electric generation from hydro and nuclear power, which do not produce greenhouse gases. Hasten implementation of smart meters, so people can get timely feedback on their power consumption and adapt their behavior accordingly. Raise fuel efficiency standards for new vehicles in PA and tighten pollution limits on existing vehicles. Disallow idling of all engines, especially diesel engines, when parked. Streamline and synchronize traffic light controls to minimize stop and go traffic.
- fund the railway system from Hoboken, N.J. to Binghamton, N.Y. This would create jobs, enhance development along the way and reduce carbon emissions by offering an alternative to driving.
- Fund/provide for environmental education so that we have an environmentally literate society.
- Put me on the board, I will fix it.

- Increase supply of natural gas to homes so more folks can use gas directly for space heating, water heating, cooking and drying and not rely so much on electricity which has a much lower Total Energy Efficiency. 2. Mandate State minimum building codes so all new bldgs have good thermal efficiency. 3. Switch State fleets to Nat. Gas. or hybrid powered cars & buses when upgraded. 4. Promote clotheslines and ban ordinances that restrict them.
- Similar to KOZ zones, build Green Loop Zones that encourage the right assemblage of businesses -- those that can reuse the waste product from one business as the starting material for their business. Require that a portion of any state funding awarded for development projects must be used for green infrastructure.
- Financial support to municipalities tackling climate change; smarter public transportation. Thanks!
- build more nuclear plants, and use more of pa's clean coal and hydro.

### Submissions received on January 24, 2009

- A radical change in philosophy is required rather than half-measures and "feel good" actions. Education is necessary to lower standards of living and change traditional living styles and approaches. Failing that, draconian laws and enforcement may be necessary. Stop heating unused areas - my thermostat in the winter in unused home areas is at 40 (not 65) to keep pipes from freezing. Stop with the air conditioning -- fans are more than enough; open the windows on commercial buildings. My lights are off if I am not physically in the room. After working hours, commercial buildings should be totally dark. The switch to CFC lights will only encourage lights to be left on (albeit more energy efficient lights) and create a huge mercury disposal problem when they are discarded -- and besides, they don't work very well when you set your thermostat at 40. The fundamental problem is that well-meaning organizations like yourself only postpone rather than solve the problem by giving people excuses to take half measures to make themselves feel good about taking baby-step actions that pale in the face of the real dramatic action that is necessary in the face of looming catastrophic environmental/energy problems. If you want more advice, contact me and I will write you a book.
- Link the popular PA lottery to energy savings. Promote a special lottery with energy saving prizes. Give out small prizes like light bulbs showerheads, paper products made from recycled paper and large prizes like energy star washers and refrigerators, on demand water heaters, insulating windows, and as grand prizes a hybrid car and /or home solar panels ( including installation). Heavily publicize the great energy and cost savings that the winners are getting.
- Program to convince American Drivers that gas prices are tied to demand and convince them to drive less as they did when prices were high. They have started going back to their old habits and gas prices are beginning to climb again. Education!!!
- Make tax cut for people like myself who have or are going to replace there heating and cooling systems with nore energy compliant equipment . Say Like 75% over 3 years on the total cost of replacement. I spent \$10,000 on new equipment and all i got was \$150 rebate. THIS WILL NOT WORK If you want people to comply they need real energy tax relief.
- plant and preserve trees
- Currently consumers do and use what is available or have known for their life. Need to: educate on importance of renew, reuse, recycle. Make more green energy sources available for homes and businesses, and create jobs for Pennsylvanians and Americans to make these available to everyone. Doing this will help conserve what we have for the future in terms of natural resources (forests, water). Pennsylvania was named for its forests, and hosts many headwaters for the Chesapeake Bay.

- We need to build public consensus on the urgent need for renewable energy. One issue that has not been addressed is the frequent opposition to wind farms and transmission lines that are necessary to put the wind energy into the power grid. We need to make a better case for the economic and environmental imperatives that require massive improvements to our energy infrastructure.
- Keep the public involved, this kind of forum was a great idea.
- When oil prices are relatively low, add a tax on gasoline that maintains a sufficiently high price per gallon that will encourage people to carpool, limit driving and purchase fuel efficient cars/trucks. The tax would be on a sliding scale.
- Require efficient buildings, as heating and cooling costs are massive. (Windows, insulation, etc)

### **Submissions received on January 25, 2009**

- Places of worship use large amounts of energy because they are big buildings. Many believe in the environment and would like to retrofit energy efficient and renewable-energy-based systems, but they cannot afford it. Tax credits do them no good because they do not pay taxes. Perhaps government could subsidize them or give tax credits to individuals and businesses who contribute to them for that purpose.
- Transparency and publication of alternative energy options, such as Community energy for wind or other alternative for farm methane. This could further be enhanced through gov incentives to make these renewable alternative cost-competitive. It should show up on electric/gas bills rather than separately. 2. Rather than picking "winners and losers," set end-goals for funding/tax incentives, e.g. achieving target energy reduction and emission/CO2 reduction toward goals. This would help develop "clean coal" and the best biofuels, etc., and puts all technologies on in an even playing field for competition.
- Although nearly all of these options are very important, the absolute priorities for Pennsylvania should be: 1) Energy literacy of our population, most of whom are subject to misinformation and confusion. 2) Require and fund more efficient buildings, equipment, and transportation systems 3) Support development of renewable technologies and infrastructure 4) Be a global leader in CO2 capture, not just for sequestration but by using renewables to convert CO2 back into fuels (cellulosic biofuels are the natural example, but there direct solar technologies look promising as well) We should also promote greatly expanded R&D into efficiency, renewables, and CO2 capture and use at the state and federal levels.
- Some programs are worthwhile, even if they are more complicated and expensive. These include sufficient investment in CLEAN and SAFE energy technologies and improving infrastructure -- including public transportation. There are some things that can be done relatively easily, and those should be implemented IMMEDIATELY. These include eliminating unnecessary packaging, demanding more fuel-efficient vehicles, expanding recycling programs and encouraging organic farming and energy conservation. Thank you.
- Expand and subsidize passenger rail, so that folks can get around the state without having to resort to cars or air travel.
- geothermal heat pumps
- Restore rail transport to West Chester and as far towards Kennett Square as possible. Help Septa buses go to Kennett Square. Find ways to support retirement and academic communities in acquiring green energy sources like geothermal etc.

### **Submissions received on January 26, 2009**

- I would like to see more of a chance for homeowners to install solar panels to generate electricity for the home instead of using the grid electric. I do not see many incentives for homeowners to do this or to have any funding in the form of grants or low interest loans.



- Environmental Education programs

### **Submissions received on January 27, 2009**

- Tax gas guzzling motor vehicles and provide tax credits for Tax the profits of utilities companies that provide PA consumers w/"cheap" dirty coal based electricity and use funding to invest in PA renewable energy projects Require businesses to recycle fryer oil for biodiesel production Set up a competitive grant program to stimulate college-level research in ways to cut green house gas emissions.
- We have to do all we can to prevent PJM and large utility companies from trying to build huge powerlines that feed off the existing dirty coal fired powerplants in Pa., WV. and Ohio and transport electricity out of state, specifically, the east coast. Pa. residents shouldn't be exposed to more pollution to benefit others in other states that are unwilling to address their energy needs. I, along with many others have been battling a proposed project by Allegheny Power, the TRAIL project for quite some time. We must all work together to stop such unneeded profit driven projects, that damage Pa.'s environment, and financially benefit a few. This is just one of many similar projects, PJM has in the planning stages. Proposed future projects can be found on their website. Now is the time to stop this insanity and protect the people and environment of Pa. There is no such thing as clean coal, and we need to start phasing these dirty plants out, not breathe new life in them by building huge powerlines to inefficiently carry electricity hundreds of miles, and add to our pollution.

### **Submissions received on January 28, 2009**

- Pennsylvania should commit to the 2030 Challenge for improving the energy efficiency of buildings. This establishes a stepwise energy use reduction program for new and renovated buildings that leads to being carbon neutral by 2030. Improvements in both building efficiency and renewable energy can be employed to achieve the goal. It can be done with current technology. Further details may be viewed at [architecture2030.org/2030\\_challenge](http://architecture2030.org/2030_challenge).

### **Submissions received on January 29, 2009**

- I don't see suburban sprawl addressed in any of the suggestions here with the exception of providing public transportation, however, we have to get people back to cities where they can use their legs rather than a car to perform simple tasks, such as walking to the store, or a restaurant for dinner. Revitalizing neighborhoods in cities is vitally important to help mitigate global warming. Families will not return to cities until the school systems are improved and investments are made in public parks and reducing crime. Somehow we have to stop the rhythm of a person walking no further than from their home's front door to their car door.
- Develop zero emissions vehicle mandate at federal and California (or, if Obama allows state autonomy, Pennsylvania) state levels. - Extend efficiency and renewable energy incentives to include residential and new construction - not just commercial and retrofit construction. (e.g. the new geothermal credits are commercial and governmental only).

### **Submissions received on January 30, 2009**

- The use of renewable / biomass alternative fuels needs to be developed if they are to replace fossil fuels over the long haul. Penn State is working on pelletizing renewable fuels but we also need enough tons to provide a consistent source for use. I am very interested in the use of alternative fuel in the coal fired electric production. With the tax credits being proposed and the CO2 neutral emissions for biomass alternative fuels, the cost has to be favorable to these types of plant. In Europe, the EU Landfill Directive has forced the work in optimization of secondary fuel from the waste management process. Waste with substantial BTU value never makes it to the landfill. It is sorted and used as fuel. In England they have WRAP which is a program to sort anything that will burn, especially plasterboard at the job site so that it can be used. Plasterboard is being used as an alternative fuel. What is often lacked here in the states is a government directive. I believe that Governor Rendell has already mandated alternative fuel usage and President Obama will soon require closer compliance to the Kyoto Protocol. If this happens, the tax on emissions will work its way to the consumer. I have sourced and optimized the combustion of a number of alternative fuels. I have the knowledge and experience on what to look at, target, measure and improve so the profit margin is impacted positively by the use of these fuels. The impact to an organization that does not burn the fuels efficiently will be negative. Business needs expertise in finding and optimizing the combustion process.

- Develop a small water-splitting cell driven by photovoltaics and a small-scale high pressure pumping system so that mass-produced hydrogen-burning cars can be fueled by the energy which the car owner gleans from sunlight which he collects on his own property. Honda Civic GX runs on natural gas, which is mostly hydrogen. Faraday first split water electrically centuries ago. None of this is new technology. All we need is the political will to subsidize a poison-free solution, rather than the old, business as usual stuff. Yes, hydrogen is dangerous when mishandled. So is gasoline. But if people have the option of collecting their own energy, they will not be at the mercy of the big conglomerates who I believe plunged us into this Depression by raising the price of fuel and siphoning off all the money.

#### **Submissions received on January 31, 2009**

- Increase extraction taxes on all fossil fuels mined or pumped in the state. Install solar water heaters and photovoltaics on all state buildings with appropriate orientation. Retrofit all state buildings for LEEDS certification. Engage the Better Place Company to set up the infrastructure for all electric vehicles

#### **Submissions received on February 3, 2009**

- no more coal!

#### **Submissions received on February 7, 2009**

- Start mining/ reusing all wastes PA has taken from other states. Stop this practice all together.

#### **Submissions received on February 9, 2009**

- I know it makes people cringe, but re-instating the rail system seems a good idea to me.

#### **Submissions received on February 12, 2009**

- Get it done as soon as possible.