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20-Point National Environmental Agenda.
Thoughts of an environmental lawyer.

1) **CHARGE A "REVENUE NEUTRAL" CARBON TAX/FEE.**

* Charging a price for carbon emissions (i.e., a carbon tax) allows us to make an "honest" assessment of the social cost of carbon. The tax encourages conservation and a shift away from fossil fuel use. A tax levels the playing field with clean energy sources and promotes renewable technologies. The tax should be returned to the people by way of a reduction in employment taxes, tax credit, and/or other method to allow all to share in the return. The reimbursement will further stimulate business in the direction of a cleaner economy. High carbon users pay more carbon tax than they will be reimbursed, and low carbon users can make a profit. "Revenue neutral" refers to the government returning all of the carbon tax to reinvest in America and to prevent anyone from playing political favorites or wasting the money.

* For decades, environmental economists have said the market system has not charged for the social costs of pollution. The marketplace has not reflected the high cost of pollution. The unpaid cost of pollution has finally caught up with us. We need to charge a tax at the point of production or entry into the U.S. for carbon dioxide equivalents.

* A carbon tax can be implemented immediately without a new bureaucracy, is not subject to influence peddling by politicians or lobbyists, and does not require a cadre of consultants, financial planners, or attorneys, etc., to comprehend and implement.

2) **SET A MINIMUM NATIONAL PRICE ON GASOLINE AND APPLY THOSE EXTRA FUNDS TO LIMITED INFRASTRUCTURE PROJECTS.**

* Substantially increase gas tariffs and make a minimum national price for gasoline that increases with time.

* During the summer, 2008, premium gas prices in San Diego, California, for example, exceeded \$4.75 per gallon. Only because of the high price did people suddenly realize they needed to make changes. With prices now around \$2.00, the positive changes are reverting. Isn't this the time to establish a national minimum price for gasoline so that the disincentive to consume remains and the incentive to developing a new generation of fuel efficient vehicles remains strong?

* Consider setting gas prices at \$3.00, and raising that slowly over time. The price should be at a level that is higher than the cost of fuel even with a carbon tax. First, apply the new tariff to mass transit, renewable energy, smart grid, and other infrastructure necessary for renewables; second, apply to repairing existing roads and bridges (as opposed to building new ones). Consider allowing a portion of these new proceeds to assist state governments on similar infrastructure projects to help them with their deficits for one year. Each state and the federal government could use this

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massive infusion of funds for job-creating projects that help us bridge over to our future energy needs and mass transit.

* By establishing a minimum price which increases according to a schedule, the auto industry will be able to rely on solid, future demand for ultra-fuel efficient or nonfossil fuel based vehicles.

3) SET A SHARP REDUCTION GOAL ON GREENHOUSE GAS EMISSIONS AND ACHIEVE BY CHANGES TO AUTO , COAL, AND AGRICULTURE INDUSTRIES; REJECT CAP AND TRADE AS SOLE APPROACH.

* The urgency of the climate change, based upon the latest science, requires not only a carbon tax but the setting of goals for GHG reduction to below 350 ppm (currently is 385 ppm). Carbon taxes create disincentives but do not ensure we reach our goal within a specified, short, time frame. BOTH must work together. We need, as a nation, to decide the time frame to achieve GHG reductions based on science and set new standards to ensure the key industries that produce the most GHG help us achieve those goals.

* Set far higher CAFÉ standards for quicker implementation than what was adopted in December 2007. Consider a minimum MPG for all vehicles, such as 30 for SUVs and 40 for cars within five years. Immediately require manufacturing of a percentage of plug-ins and electric cars according to a schedule that increases rapidly with time and allows flexibility to adjust according to technological breakthroughs.

* "Clean coal" is an oxymoron and one of the dirties forms of energy used today. Coal is plentiful in America (and China), so vested interests naturally want to continue to use coal by giving it a green spin. Clean coal is nothing more than a sales pitch. Until, carbon can be effectively captured and stored (sequestered) on a commercial, larger scale, there should be no new promotion of coal. The science is not there at this time, and the amount of GHG emissions is so high that we cannot afford to assume all will be fine on the current path.

* Eliminate the practice of "mountain topping" in which mountains are shaved in order to access the coal, causing immense ecological destruction and water pollution.

* Phase out existing coal plants as soon as practical, and no later than 20 years, unless a breakthrough occurs with carbon capture and sequestration.

* Methane is 22 times as strong as carbon dioxide as a GHG. Agriculture contributes about 1/3 of the methane emissions. Cattle, rice plantations, and other agricultural activities are major contributors of methane gas.

* Controls need to be implemented to minimize and capture methane for energy generation

* *In the past, I supported cap and trade to achieve GHG reduction goals in the most efficient manner possible. I have changed my opinion recently. I now believe cap and trade so be difficult to conceptualize and will be problematic to implement. The European model failed because credits were given away or given away unfairly as a result of political influence. European nations have shown that cap and trade is too readily subject to political pressure and double speak, resulting in claims of progress while coal use and GHG increases. For instance, Japan boasts of being the "greenest"*

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country, yet they buy credits from CHINA, and both countries continue to have increases in GHG!

** Cap and trade also takes years to launch, and if not effective, what do you do then, and how do you make up for the critical loss of time? If cap and trade is pursued, it is critical that all credits are sold at a sufficiently high price that will deter further GHG emissions in addition to having a carbon tax imposed where the carbon-based product is first introduced.*

4) SUBSIDIZE R&D OF CARBON CAPTURE AND SEQUESTRATION.

* Subsidize R&D for carbon capture and sequestration in order to find ways to pull all GHGs from smokestack emissions and store, or sequester, them in a safe place.

* If capture and sequestration is ever proven to be feasible on a commercial scale, that would then allow us to use our vast reserves of coal.

* In the meantime, countries such as China and India are building coal powered plants at an alarming rate with no end in sight (roughly one new coal-fired power plant per week in China). Countries will likely continue to use dirty coal, regardless of our country's policy, thus underscoring our need to continue to explore ways to capture and sequester carbon for our own use and world benefit.

* If capture and sequestration prove feasible, then "clean coal" might some day mean what it says, and coal could be part of our mix of energy sources again without contributing to GHGs.

5) SMART ENERGY GRID.

* If a stimulus proposal is needed to lift our economy, then invest in our future and job growth in a way that maximizes both job creation and the further development of a new energy system based on renewables.

* A "smart" grid increases efficiency in the transmission of electricity, partly by using DC current to get rural wind energy sources to the urban centers. It also incorporates the digital age by establishing communication between consumer products and the electrical supply providers. With "smart" products, your dishwasher and other products communicate with the utilities so that they may defer their task until the overload in demand has passed, such as at nighttime on high-demand days, etc., when power is cheaper and threat of brown or black outs has passed.

* Electric car batteries can feed the grid during daytime demands and repower when power is cheaper at night.

* The Department of Energy has found over \$100 billion is lost annually as a result of problems such as blackouts in our existing, antiquated, patchwork electrical grid. The cost of a new grid may be several times that amount. That will feel like a good deal after just a few years and help stimulate business.

* Construction of a smart electrical grid will spur renewable energy projects - new jobs, clean energy - many in areas that are best suited for wind, etc., but are not currently connected to the grid.

6) FEED-IN TARIFFS.

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- * We need to create an incentive for everybody to install renewables. Establish Feed-in Tariffs (FiTs) to provide a reasonable profit to all people who install and generate renewable energy that is supplied to the grid. Guarantee a 20 year rate of return. Set a different rate for each category of renewable energy according to intent to spur investment. Set rates every 3 or 4 years and fine tune as you proceed.
- * Utilities would be required to accept and pay for the energy, assuming the energy is consistent with grid capacity or requirements.
- * Residents and businesses can then find a bank willing to lend money to make the investment. The investment is predictable and makes economic sense.
- * In Germany (and elsewhere in Europe), FiTs have unleashed entrepreneurs across the country. As a result of introducing FiTs a few years ago, Germany now receives 14% of its energy from renewable sources at a added monthly utility cost of about \$5 for an average family.
- * FiTs are a necessary way to involve broad sectors in becoming energy independent, and to increasing capacity so as to avoid additional conventional power plants, even though the overall percentage of energy production may not be large. (Wind remains far more efficient than PVs, and most people will only be able to contribute to the solution with PVs.)

7) IMPLEMENT A NATIONAL LAW TO PROVIDE APPROPRIATE UTILITY INCENTIVES.

- * Utilities work across a patchwork of state regulations with some federal oversight (FERC). As a general rule, state laws permit privately owned utilities to make their money by selling energy or by making a rate of return on their capital investments over the lifetime of the improvement. Both create perverse incentives that are inconsistent with reducing GHG, leading often to token "green" efforts and foot-dragging toward large-scale development of renewables.
- * Utilities should be rewarded for conservation efforts, smart energy grid, renewable portfolio.
- * As described above, require all utilities to accept all feed-in tariffs that are compatible with the capacity and needs of the grid.

8) DOMESTIC OIL AND GAS PRODUCTION FOR LIMITED DURATION AND PURPOSE.

- * Domestic oil and gas production, within nonsensitive areas, and without large scale ecological damage (e.g., shale oil), should be used to help us as we transform to a nonfossil fuel economy.
- * Increased domestic production of oil and gas should not be viewed as necessary for our future well-being, but rather as a relatively short-term endeavor to keep dollars and jobs in the U.S. while we transition out of fossil fuels.

9) IMPLEMENT NATIONAL BUILDING CODE THAT REQUIRES CARBON NEUTRAL, ENERGY-PROVIDING DEVELOPMENT AND ENVIRONMENTAL JUSTICE.

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- * Implement a new building code for energy purposes. All new development should be GHG "neutral" by offsetting the GHG caused by the construction and by providing all anticipated energy needs. Require all new development to cover its energy needs without fossil fuel by use of PV, wind, co-generation, geothermal, etc., onsite or by arrangement with offsite provider. Allow offsite offsets to the extent there is insufficient space onsite to provide for their own energy needs.
- * Create energy coops using solar and wind turbine farms and other renewables in desert/mountains and other suitable areas where parties can contribute to offsite energy production if needed.
- * Change development requirements and mandate high thermal insulation for all new residential, commercial, and industrial development to minimize heat/cold loss.
- * Require buildings to be at least 30% more efficient in their energy use, achievable with available materials.
- * Promote environmental justice by providing a choice to developers who need to do off-site mitigation to make needy neighborhoods the beneficiaries of conservation measures.
- * Further promote environmental justice by establishing training/work programs in underprivileged areas to develop green skills and jobs and implement work in needy areas.
- * At time of transfer of property, require retrofit to at least LEED silver level and PV to maximum extent feasible for site.
- * Establish carbon neutrality goal for all government operations.

10) **CREATE FUNDING AGENCY TO MAKE LOW-INTEREST LOANS TO GENERATE RENEWABLE ENERGY; REWARDS SYSTEM.**

- * Create federal funding agency for renewables.
- * Biggest impediment for most who wish to develop renewables is up front funding.
- * Stimulate individual participation in renewables.
- * Allow loans to be secured by the property, and assessed against the property like a property tax, and follow the land, so that an owner who installs, for instance, PV on his house, and then moves, is not saddled by the loan.
- * Encourage a race in residential installation of PV. Reward each block that becomes energy independent (e.g., where every resident has installed adequate PV) by placing that street at the top of the list for undergrounding of utilities or other suitable reward (e.g., repaving of street if in disrepair).

11) **IMPLEMENT MAJOR CONSERVATION MEASURES.**

- * The cheapest way to save energy and energy costs is through conservation.
- * In conjunction with environmental justice measures noted above, implement a system to achieve maximum energy efficiency quickly with existing structures and operations as quickly as possible.
- * Start with requiring double pane windows, better insulation in accessible areas, and energy efficient lights in homes at time of sale, or within a short time, such as ten years for windows, and two years for insulation and lighting.
- * Buildings are extraordinarily wasteful with energy.

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- * If the energy self-sufficiency goal (# 9 above) is in place for new structures, developers should have sufficient incentive to maximize the efficiency of new buildings.
 - * Install individual meters for tenants so that they know how much energy they are using. Landlords should be encouraged to contract for their tenants to pay for their own energy costs.
- 12) REQUIRE GOVERNMENT PARTICIPATION IN RENEWABLES; HIGHWAY PV PROJECTS.
- * Require government facilities comply with the various standards described above.
 - * Coordinate with interstate highway agencies to install PV along freeway corridors.
 - * Cover water and other viable aqueducts with PV to reduce evaporation and generate power.
 - * Guard against theft of copper, etc.
- 13) REQUIRE NEW DEVELOPMENT PAY ITS OWN WAY IN TERMS OF ENVIRONMENTAL NEEDS OF THE AREA; WATER, WASTEWATER REUSE, AND DESALINATION.
- * Set national requirements for development to pay its own way, environmentally speaking, by requiring "green" buildings, PV, water efficiencies, water capture, graywater reuse, etc., to the maximum extent practical and as needed within particular ecosystems.
 - * Particularly in dry areas, develop gray water system protocols that allow people to reuse gray water for irrigation purposes and avoid contributing to sewage system demands.
 - * Orient buildings to capitalize on sun.
 - * Ban wood burning stoves and fireplaces from new homes where practical and use an alternative fuel with least carbon impact (such as natural gas).
 - * Require new pools be powered and, if desired, heated, with PV or other renewables.
 - * Preserve open space to maximum extent possible. Consider new plantings in areas where plants grow efficiently without added water and energy to offset loss of open space.
 - * As general rule, in dry, water-restricted areas, only allow drought-tolerant xeriscape.
 - * No new water-intensive landscaping should be allowed in arid regions, with minor exceptions for a limited area of back yards, and for park or athletic purposes, unless the development can rely on reuse of its own graywater to support more water-intensive landscaping.
 - * Require that all new development in such regions not require any new water, unless the proposed development will use the least amount of water feasible, while reusing the maximum amount of graywater feasible, and that water is actually conserved or reused in sufficient amounts *in the region* to anticipate projected regional shortages such that enough water is saved to still accommodate the new demands of the additional development. Allow off-site mitigation.
 - * Maximize tertiary treatment of sewage for reuse (irrigation or drinking) or groundwater recharge.

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- * Establish sewage reclamation plants at, and distribution lines from, strategic locations along the main sewer trunk with ultimate goal of complete sewage reclamation and zero discharge to rivers, waterways, or ocean.
 - * Promote desalination in coastal areas with full energy offsets by renewables.
 - * Change development requirements and limit landscaping options to that which can be supported under ordinary conditions by onsite graywater reuse.
 - * Reduce amount of hardscape so more runoff can be absorbed.
- 14) **MAKE VENDOR/CONTRACTING REQUIREMENTS GREEN.**
- * Implement new contracting requirements, such as requiring parties that do business with the government to document their own efficiency/green measures (e.g., low-polluting, high-efficiency vehicles; carpooling; installation of PV; carbon offsets).
 - * Give priority to vendors that are carbon neutral, install PV, use electric or hybrid vehicles, etc.
- 15) **REMOVE COUNTER-PRODUCTIVE SUBSIDIES.**
- * Check all subsidy programs to ensure they achieve goals that are consistent with reduction of GHG and clean energy production.
 - * Example: remove all tobacco subsidies and replant such areas with biofuel crops with highest conversion efficiency.
 - * Do not use food supplies, such as corn, that reduce food for people and raise food prices, for biofuel.
 - * Remove subsidies to oil and gas industry.
- 16) **REPLANT FORESTS.**
- * Identify areas in United States for forest replanting to help take in carbon.
 - * Push for treaties protecting and enhancing rain forests.
- 17) **SUBSIDIZE FOURTH GENERATION NUCLEAR POWER.**
- * Subsidize R&D of 4th generation nuclear power, which can use nuclear *waste*.
 - * Even if our country decided not to build nuclear plants, other countries will do so. We should develop the safer, lower-pressure 4th generation nuclear technology and share that with the world so that the uranium which we fear can be developed into weapons' grade plutonium, and be misused, is no longer needed for nuclear power, and so that we resolve our nuclear waste problem.
 - * Such nuclear power plants may also help power areas heavily reliant today on coal, and in regions with highly concentrated energy demands.
- 18) **PORTS.**
- * Require cruise ships to no longer burn fuel and pollute while at dock in idle.
 - * Provide electrical outlets for use at dock.
 - * Coordinate timing of cargo ship departures to avoid idling of ships at destination as they await their turn at dock.

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19) **FISHERIES.**

- * We must enhance the health of the oceans and fisheries so that ecosystems and an ample supply of fish are sustained.
- * Establish "catch share," in which a quota is set for the number of fish that can be caught in threatened fisheries. Fishermen share in the returns according to an agreed upon allotment, which is usually based on historical catch percentages.
- * The quota changes each year according to the health of the fishery.

20) **PROMOTE SMALLER FAMILIES.**

- * Encourage reduction in population growth
- * More people place greater demands on ever-decreasing resources.