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Financing Local to Global Public Goods: An Integrated Green Tax Perspective

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Summary: This paper details a number of successful practices and work-in-progress on green tax shift policies that harness incentives for efficient, equitable, and sustainable wealth production and distribution. Research is cited which shows the impressive potential of green tax reform to help solve major social, economic and environmental problems facing our global civilization. Additionally, presented is an integrated local-to-global public finance framework based on green taxation principles and policies.

World stability and human security require that we re-think the logic of globalization, including the best ways to finance public goods such as health, education, infrastructure, environmental sustainability and efforts for peace and conflict resolution. The challenge is to evolve a coherent, integrated and ethically based local-to-global tax system out of the current public finance hodge-podge of the world's more than 180 nation states.

Green tax shift policy is a rapidly emerging new perspective on tax reform that emphasizes the incentive capacity inherent in public finance policy. From this vantage point, taxation not only raises money necessary to fund governmental services it also reflects the overall value system of a given society, rewarding some activities while punishing others.

The goal of green tax shift policy is the creation of a system of public finance that will strengthen and maximize incentives for:

- Fair distribution of wealth
- Environmental protection
- Wealth production
- Provision of adequate government services
- Peaceful resolution of territorial conflicts

Green tax reform makes a clear distinction between private wealth and common wealth. Private wealth is that which is created by individual and collective labor. Common wealth is that which is provided by nature.

This public finance approach removes taxes from privately created wealth and increases taxes and user fees on common wealth domains used for human economic production. Captured in brief soundbites, "tax waste, not work," "tax bads, not goods," "pay for what you take, not what you make," and "polluter pays" become tax shift principles readily translated into voter friendly policy recommendations with broad based political support.

Reducing or eliminating taxes on private wealth means slashing taxes on:

- Income, especially from wages, payroll
- Capital, especially of sustainable quality
- Sales, especially for basic necessities
- Homes and other buildings

With careful calculations usually geared to overall revenue neutrality, green tax shifting balances cuts to the above by increasing taxes and fees on common heritage resource use such as:

- Emissions into air, water, or soil
- Surface land sites according to land value
- Public lands for timber, grazing, mining
- Electromagnetic spectrum
- Geo-orbital zones
- Oil and minerals
- Fish in the ocean
- Water resources

Green tax shifters also aim to eliminate numerous subsidies deemed no longer necessary, environmentally or socially harmful, or inequitable and unfair. Slated for drastic reduction or complete removal are subsidies for:[1]

- Energy production
- Resource extraction
- Waste disposal
- Agriculture and forestry
- Private transport and the infrastructure it requires
- Investments designed to exclude labor from production.

So far these reforms have been proceeding in a patchwork manner, but what matters is that the process has begun and the principles are being clearly articulated. Combining the efficiency and fairness taxation criteria of both Adam Smith and Henry George, green taxes largely conform to what a "good" tax should be:[2]

- Cheap to collect
- Fall as clearly and directly as possible on the ultimate payer
- Embody no favoritism or special exceptions
- Correspond to the payer's ability to pay
- NOT bring about undesirable economic distortions.

Distilled to the essence, taxes should be cheap, direct, equal and benign. It is imperative that the fiscal policy for good democratic governance be guided by these fundamental principles. Unfortunately, most taxes are not based on what a good tax should be, but instead current public finance mechanisms largely exploit both people and the planet.

World Revenue Review

The incentive signals of the world's taxation systems promote waste, not work. Approximating the composition of the world's $7.5 trillion tax pie reveals that 93% of taxes fall on work and investment while only 3% is collected from environmentally damaging activities. A mere 4% of global tax revenues is captured from natural resource use and access fees.[3]

A global tax shift scenario proposed by David Roodman at Worldwatch would collect 15% from environmental damage, 12% from land use and resource royalties (to total $900 billion each year) and cut environmentally harmful subsidies by 90%. This would free up an additional 8% of current revenues ($600 billion) and permit a nearly one-third reduction on wages and capital to 65% of total global taxes.[4]

Other researchers have calculated the potential for a total shift onto the full collection of resource rents, as will be detailed later in this paper. While being more ambitious in scope, this would also provide increased benefits through even stronger incentives for environmental protection and efficient, equitable wealth creation.

Billions of dollars have been loaned by the World Bank or channeled through the United Nations Development Program (UNDP) since 1965 to strengthen the capabilities of developing countries and to promote higher standards of living, faster and more equitable economic growth and environmentally sound development. While these explicitly stated UNDP goals are laudable, they have fallen far short of the mark.

Between 1994 and 1997 UNDP spent almost $6.5 billion. Of that amount, 26 percent went to eradicating poverty and livelihoods for the poor; 25 percent went for good governance; 24 percent for environmental resources and food security; 23 percent for public resources management for sustainable human development; and 2 percent for "other" which includes gender programs.[5]

But parts of our global economy are becoming weaker, with some 2 billion living below the poverty line (which is to say they earn less than the equivalent of $300 annually.) In the past 15 years, per capita income has declined in more than 100 countries and individual consumption has dropped by about one percent annually in more than 60 countries.[6] Clearly, larger detrimental influences have more than offset programs established by national and international aid agencies.

In 1960, the poorest countries, accounting for 20 percent of the world's population, had 5 percent of the world's income; the richest 20 percent had a 63 percent share. By 1990, the corresponding share of the poorest had declined to a mere 1.3 percent.[7]

The gap between the world's rich and poor has continued to widen with the richest one fifth now having 85 percent of the world's income. The 20% of the world's population that lives in the richest countries have generated almost three-quarters of the cumulative carbon dioxide emissions that are a primary cause of global warming. A fifth of the world's population is consuming four-fifths of all resources consumed annually, many of which are non-renewable.[8]

The world enjoys a $25 trillion economy. According to the United Nations, it would take just $80 billion to finance an anti-poverty program that could provide access to basic social services for all who are empoverished. "It is an ethical scandal that we do not provide the basics of education and health for everyone in a world with a $25 trillion economy," says Richard Jolly, author of the UN's Human Development Report (1997).[9]

UNDP now defines its major roles as eradicating poverty and providing an "enabling environment for social development."[10] To further these goals UNDP intends to contribute to the sustainable management of environment and resources and establish basic social services for everyone. It is hoped that those working through this and other agencies responsible for global well-being will grasp the potential of green tax reform. If they do, they will have to fully confront the challenges of the world's present inequitable and inefficient tax systems.

UN officials point out that the cost of eradicating poverty is just one percent of the world's income. But since governments fund UNDP and other UN programs, and governments rely primarily on the taxation of wages, efforts to stimulate economic development are paid for by the income of workers throughout the world. And because the increase in land values which accompanies development is not recaptured for the common good, these efforts frequently have the unfortunate side effect of enriching the few who own and control land and resource wealth and pay low or no fees, taxes, or royalties for their privileges. The way the current market system is structured, as development proceeds, the rich/poor gap grows. A new philosophy and development approach is needed for the 21st century.[11]

Green tax principles are an explicit and well-reasoned set of values and goals that can be succinctly stated - tax more heavily the behaviors that use and harm the earth's land and natural resources and untax activities we want to support and promote.

To reach the goals of equitable, sustainable development, closer attention must be given to the question of "Who benefits and who pays the taxes?"

Recommendations contained in UN documents, which advocate taxes on land and resources to ensure equitable access and to recapture land values enhanced from development activities, must be heeded.[12] Activities that damage common heritage resources of air, fresh water, land and sea must be penalized.

The footprint of industrial man is now pressed into every bit of the planet. High levels of poisonous industrial chemicals have been found in the Arctic peoples. If the entire world were to have the same patterns of consumption as the industrialized countries, total global industrial output would need to rise by four to tenfold depending on future population levels. Pollution levels would be unimaginable. But because of the poverty of the poorest one fifth of the world's population, there is a need for a new model of sustainable 'eco-industrialism' that is less energy and resource-intensive.

Market Efficiency and Ecological Equity

The state of the earth now requires that the costs of industrial production and human commercial activity no longer be externalized onto the global commons. But bureaucratic regulations to prevent pollution are often complex, unwieldy and expensive. Sufficiently high user fees and pollution permits which encourage business and industry to find more efficient and cost-effective controls are examples of green tax incentives that limit harmful outputs.

The "Economists' Statement on Climate Change," signed by over 2500 economists including eight Nobel laureates, is the strongest formal recommendation for green tax shifting that has emerged to date. Noting that the Intergovernmental Panel on Climate Change had determined that there was indeed a discernible human influence on global climate, the statement urges market-based policies as the most efficient approach to slowing climate change. "The United States and other nations can most efficiently implement their climate policies through market mechanisms, such as carbon taxes or the auction of emissions permits. The revenues generated from such policies can effectively be used to reduce the deficit or to lower existing taxes."[13]

The exact structuring of the proposed taxes or auction permits is crucial in terms of global equity considerations. In 1990 the World Resources Institute (WRI) recommended apportionment of the responsibility for the carbon dioxide and methane emissions that contributed to global warming. However, it was found that the countries that produced the larger quantities of these gases had been given larger shares. In other words, those who had polluted the most would continue to have the right to pollute the most. The Centre for Science and Environment (CSE) launched a critique of the model, claiming that global environmental space should be equitably shared amongst all human beings on earth.

CSE's "Statement on Global Environmental Democracy"[14] points out that the South needs ecological space to grow but that this space has already been colonized by the North. Recognizing the complexity of existing local-to-global property rights, two different economic approaches are recommended. For pollution from products originating within nations, market-pricing mechanisms should be modified through public policy so that ecological costs of production and consumption are internalized. For global resources, "the sustainable use of global common property should be encouraged through equitable entitlements."

CSE sets forth a precise policy approach for the equitable apportionment of global common property. "Within a globalized economy, those who consume more than their fair share of the world's environmental space must be asked to buy the extra space from those who do not consume their share. And those who consume beyond their own share should pay economic penalties to a global fund which would compensate those affected by the resulting environmental damage, and underwrite a prevention programme."[15]

Equity is a moral, ecological, and political requirement for a sustainable future. Green tax shifting is based upon the principle of equity of access to resources for all nations and peoples. Calculations determine the amount of resources that can be consumed relative to population size and the allowable amount of pollution that can be discharged into the environment. "The equity principle is fundamental to a modern, humane capitalism, and its proponents should support free and fair access to resources as the crux to providing quality of life for all" is how Michael Carley and Philippe Spapens express it in their book *Sharing the World*.[16]

Viewed from the ethic of equal rights to the creation, the undertaxation of land and natural resources is a form of theft from the common heritage. Governments charge much less than they could and should for the extraction and use of resources. Unfortunately, it is the case that much collusion between government and vested interests factor into this unequal equation. Fortunately, an organized and focused citizenry can remedy the situation. All can join in on one of the most revealing games on earth - who owns the planet and what is it worth?

Here are a few examples of common wealth rip-offs:[17]

- In the 1970's and 80's President Marcos granted cheap timber concessions to his allies, which then generated $42 billion in profits for an elite 480 families while impoverishing millions of rural people by ruining their land.
- In Indonesia, loggers paid only $500 million in 1990 for rainforest logging concessions, worth some $3.1 billion (in 1997 dollars). For every dollar that flowed into the country as aid, another dollar flowed out to timber magnates with ties to President Suharto.
- In California's Imperial Valley large-scale farm owners hold rights to a quarter of the flow of the Colorado River, water from which is delivered for free via a federally funded 80-mile canal. In the Central Valley, the government charges many farmers only $2.84 for a thousand cubic meters of water, but other farmers pay 28 - 50 times as much for water from a state irrigation project.
- Hardrock mining is nearly free on public lands in Canada and the USA. In 1994 a Canadian firm bought 1,950 acres of federal land in Nevada for $5,190; once mined the tract contained gold worth $10 billion - 2 million times as much as the transaction price.
- In Alaska's Tongass National Forest, one of the world's largest temperate rainforests, 500-year old trees are turned into cellulose for disposable nylon stocking. Between 1982 and 1988 the government spent $389 million on roads and other services for private clearcutting operations yet earned only $32 million.
- The US has just given away to private corporations the right to digital portions of the electromagnetic spectrum valued at $70 - $110 billion.

Here are examples of public collection of common wealth revenues:

- In 1992 Honduras began public auctioning of timber concessions and succeeded in raising sale prices from $5 to $33 per cubic meter of timber.
- The Philippines also began reforming timber-pricing policies in the 1990s, and now captures about 25 percent of the value of its timber, up from 11 percent.
- In contrast to the timber private windfalls, Indonesia now captures 85 percent of the in situ value of its petroleum deposits, enough to generate a quarter of its tax revenues.
- Norway is also collecting substantial royalties from its oil reserves and is putting much of it into a pension fund whose value is expected to climb to $25,000 per Norwegian by 2000.

- Developing countries charges to industrial-county governments for fishery access now total $500 million to $1 billion a year.
- Costa Rica, home to 1 in 20 of the world's terrestrial species, is charging for access to the genetic secrets of their biological wealth. The Merck drug company has agreed to pay to the country's Instituto Nacional de Biodiversidad $1 million for providing 10,000 biological samples.
- A 1996 auction of airwave frequencies brought $10 billion into the US government, more than any other auction in history.

Resource Trusts for Public Revenue

Let us be clear that the strategy of shifting taxes off of work and onto the use of land and other natural resources is contained within a system that gives monetary value to the contributions of both labor and land. The shift depends on institutions of market value land assessments and mineral valuation. Nature is thus ascribed value in its commodified forms.

Privatization of formerly common lands subordinated both people and social institutions to the market economy. But these same market forces, harnessed differently, can be used to provision an environmentally sustainable and socially stable base for the expansion of human potential into limitless realms of mental and spiritual expression.

Levying user charges on natural resources may require fine-tuning which takes into account various other values, such as cultural, historical, and generational. Even so, such efforts may arouse the suspicion of those seeing the limitations of market systems. Writers such as Michael Goldman are concerned about new forms of social control that can lead to intensified exploitation of all forms of nature. Goldman states:

> If we are to learn anything from the 1992 Earth Summit in Rio - the Greatest Commons Show on Earth - it is that the objective of the Summit's major power brokers was not to constrain or restructure capitalist economies and practices to help save the rapidly deteriorating ecological commons, but rather to restructure the commons (e.g., 'privatize,' 'develop,' 'make more efficient,' 'valorize,' 'get the price right') to accommodate crisis-ridden capitalism.[18]

Al Andersen at the Tom Paine Institute[19] acknowledges this concern and recommends that a large part of common heritage wealth be excluded from the monetized economy to be held as trust lands for parks, paths, roads and nature reserves providing habitats for all species.

Land and resources in what is now both the public and private sectors can be used as market commodities yet still be treated as common heritage wealth. This does not require as great a stretch as one might imagine. Zoning practices allow a degree of community control in land use decisions on private land, and current forms of property tax do collect a portion of land revenues to fund local government. User fees for grazing and timber and mineral extraction on public lands are usually much too low, but they are being collected.

These kinds of current land use rules can be viewed as covenants which condition land access. Local-to-global trusts, administered by democratically elected and carefully monitored trustees, could be responsible for enforcing land use and user fee covenants and for wisely and equitably allocating the funds collected. The Internal Revenue Service could be transformed into a multi-tiered Internal Resource Revenue Service.

The Alaska Permanent Fund functions as a good example of a resource trust. When Alaskans found themselves with billions of dollars of state oil revenues which began flooding state coffers in 1974 they chose three uses for these monies: (1) let state government use part of it for schools, highways, and other infrastructure; (2) return a large portion to citizens directly through annual cash dividends (the 1998 amount was $1,540 per-capita); and (3) invest the remainder in a portfolio of stocks and bonds, so that dividends would continue after the oil runs out.[20]

Peter Barnes envisions a similar type of trust for the sky. The sky can be viewed as a container for the carbon wastes of the fossil fuel industry. The sky's waste absorption capacity has become a scarce and finite resource that has been given away on a first come first served basis. But viewed in this way, the sky is clearly a common heritage resource and for industrial society it is literally worth trillions of dollars.

Barnes plan is to establish a Sky Trust whose underlying asset is America's share of the atmosphere's carbon absorption capacity. The trust structure is a market-based entity that can own and manage assets, charge for use of its assets, and periodically distribute its income to shareholders ("beneficiaries" in trust terminology). It has a board of trustees who are legally responsible for its actions and it declares a mission, which its trustees are legally bound to fulfill. Barnes' calculations show that revenue from atmospheric rent could exceed $1 trillion over the next 15 years.

"In essence, the Sky Trust would be a scarcity rent recycling system whose underlying formula is: from each according to his use of scarce sky, to each according to his equal ownership," says Barnes.[21]

Others also project massive potential for common heritage resource revenues. California resource economist Mason Gaffney has compiled a detailed list of rent yielding natural resources that are part of the proposed green tax base. Major sources of rent include energy, specifically hydrocarbons, uranium and hydro; hardrock minerals; fresh water and adjunct resources for recreation, fishing, navigation, reservoir sites, watersheds, waste disposal; timberlands; electromagnetic spectrum; geosynchronous orbital bands and LEO (Low Elevation Orbits); geothermal, wind and solar sites; the gene pool, which includes seed patents; natural herbs, medications, and breeding stock.

Gaffney concludes, "Aggregate resource rents, in a tax-free economy, would be adequate to replace all present taxes. That conclusion is subject to a comprehensive definition of rent."[22]

Addressing Deadweight Loss

Taxes on labor and production, wages and capital, have destructive consequences that result in economies that are much smaller than they could be. The same application of labor and capital could produce much more if they were untaxed. Public finance economists refer to the destructive effects of taxation as the *excess burden* or *deadweight loss* meaning that people have to work harder to achieve the desired output.

Careful calculations of numbers from all the G7 countries show that there could be a significant gain in output and per capita income with a shift to public collection of rent for resources. Overall it is estimated that the G7 economies had levels of output in 1993 (last year figures were available) that were only 52 percent to 77 percent of what they could be with a full green tax reform program. The US had the lowest taxes and the highest level of output at 77 percent of total possible estimated capacity, followed by Canada at 64 percent. Trailing were the higher tax nations of Japan at 58 percent and UK at 55 percent.[23]

It was estimated that for the US economy in 1993, the reduction in excess burden of taxation that would have been possible by relying primarily on rent for public revenue was $784 billion or 14 percent of net domestic product. In terms of the 1998 economy in 1998 dollars, this means that a better public finance system could yield an increase of about $1 trillion in the well-being of citizens. The reductions in excess burden as percentages of net domestic product are even greater for the other G7 economies, because of their higher current taxes.[24]

Taxes on wages and capital depress the net income that could otherwise be claimed by the owners of land and natural resources. With removal of these taxes, land and resource rents would increase considerably and could then be recaptured and distributed as government services or direct citizen dividends for the benefit of all. Those that own or use the gifts of nature would be charged for the privilege so that nature's wealth could not be hoarded or monopolized by the few. "Pay for what you take, not what you make" is the soundbite.

During 1995, collective profits of the world's top 500 companies rose by 15 percent to US$323 billion, while the size of their workforces remained approximately constant.[25] Separating productive capital from resource rents, it can be understood that a substantial portion of the "profit" of these corporations is drawn from their private claim to land and natural resources.

Land ownership statistics are hard to come by, but a 1979 study found that in the US 568 companies controlled 301.7 million acres of US land - more than 11 percent of total land area and 22 percent of all the private land. Those same companies' land interests worldwide comprised a total area larger than that of Europe - almost two billion acres.[26] A mere 2.5 percent of landowners with more than 100 hectares controlled nearly three-quarters of all the land in the world, with the top 0.23 percent controlling over half.[27] The concentration in land ownership has continued, but such statistics are the well-kept political secrets of the neo-liberal economic legacy that made land and natural resources a mere subset of capital.[28]

Tax Waste Not Work

Tax changes that enhance the position of workers AND trigger environmental improvements are the order of the day. One of the first examples of environmental tax reform as a two-pronged incentive strategy - raising taxes on the use of resources while decreasing taxes on income - was in 1991 when Sweden began levying a carbon dioxide tax and, in conjunction with it, cut the income tax.[29]

Other countries followed Sweden's lead, as Denmark, Spain, the Netherlands, United Kingdom, and Finland cut taxes on personal income and wages and raised taxes on motor fuel, coal, electricity, water, waste, carbon emissions, pesticide, natural gas, and other energy sales. These were small shifts, to be sure, the largest being Denmark which eco-shifted 2.5 percent of total tax revenues.[30]

In the UK, a study proposing an increased escalatory tax on road fuel of 17.6 percent per annum and the revenue generated used to decrease employers' national insurance contributions could increase employment by 1.275 million in about ten years. More conservative modeling suggests a gain to the UK economy of 400,000 to 700,000 jobs that could reduce unemployment by a quarter. A CO_2-reduction energy scenario in Belgium forecasts a growth in employment of 27 percent in 2000 with a reduction in energy consumption and CO_2 emissions of 8.5 percent. Reducing value-added taxes on products that are not energy-intensive would encourage their use.[31]

In the US, Andrew Hoerner, a senior research scholar with the Center for a Sustainable Economy, a nonprofit public interest research organization based in Washington, DC, has compiled a "Survey of State Initiatives" detailing 462 environmental tax provisions currently in place at the state level. "We are still learning how to design environmental taxes and tax incentives, and many current approaches to environmental taxation will surely be found wanting," says Hoerner. "But there is a danger in a rush to judgment, in trying to impose a single theoretical paradigm on the immense diversity of emerging instruments."[32]

Tax shift scenarios are being detailed for state and regional levels. A Northwest Environment Watch (NEW) proposal for the Pacific Northwest - British Columbia, Idaho, Oregon, and Washington - encompasses 84 percent of provincial, state and local revenue. The model reduces taxes on business, income and sales from 47 percent to 16 percent, with the loss being made up for by pollution and carbon taxes and taxes on traffic, hydropower, water, timber, fish and minerals. The 27 percent property tax, falling as it does more on buildings then on land values, is shifted to a pure land tax.[33]

This NEW scenario was the first to thoroughly integrate land value, or site value, taxation with environmental tax reform, and thus addresses a potential problem with some forms of ecotaxation. The very success of ecotax policies based on the polluter pay principle means that this tax base could shrink as incentives for energy conservation expand. Similarly, total tax take on non-renewable resources could eventually plummet as we begin to rely more on renewable energy such as wind or solar.

The advantage of including land value taxation as an ecotax is that surface land values either increase or decrease depending on the intensity of economic development. It is a tax base that automatically adjusts to a community's need for public finance. The more people and economic activity is focused on a particular area of land, the higher the land values and the greater the potential tax base. A tax or user fee based on land value is thus a stable and consistent source of public funds. Additionally, land value taxation provides a key to both political and economic decentralization.

Exploding Inequality

The addiction to the pounds of flesh that the nations have been extracting from their citizens will have to be cured. Many of us, at least in the US, now believe that there is excessive power and control wielded at the federal level. We feel disenfranchised by those who have concentrated economic wealth and now have disproportionate influence on the political process. Our hard-earned dollars are extracted from us without our consent and spent in ways that we do not approve. We are being subjected to taxation without representation.

The United States income tax is not the progressive tax that it used to be and that it was meant to be. The income tax enacted in 1913 was fair and simple and only twenty pages long. Only the richest 5% of households paid income taxes, which were actually more on capital gains than on wages.[34] Most of the "progress" in the income tax since then has been in progressively pushing the tax burden onto middle and lower income wage earners and in increasing the size of the loopholes and shelters for the wealthy.

With the addition of Social Security taxes, the income tax steadily devolved into a stiff payroll tax whose surpluses cover budget deficits. But the payroll tax is a highly inequitable flat tax. Everyone pays 7.65 percent (the self-employed pay 15.3 percent) UNTIL wages reach $68,400, after which they are not taxed at all!

Ted Halstead, founder and former president of Redefining Progress proposes a $10,000 payroll tax "personal exemption" similar to the one that already applies to income tax, with the resulting $140 billion gap filled by pollution permit fees. Such a tax shift would "strengthen our economy, boost wages and job creation, fix our troubled tax system, and protect the environment, all without raising the deficit," says Halsted.[35]

Meanwhile the growth in the federal government brought a growth in federal benefits, the bulk of which go to the well to do. Peter Peterson estimated an annual flow of $570.7 billion to the non-poor versus $109.8 billion to the poor. The average benefit to households with income over $100,000 exceeds that to households with under $10,000.[36]

This trend is clearly mirrored in rising income inequality and stagnating middle and lower class wages. Though annual growth rates for household income were positive for all income groups in the previous three decades, from 1973 to 1994 average incomes declined for 60 percent of the US population. In comparison, average real income increased 27.2 percent for the top fifth and 44 percent for the top 5 percent.[37] Currently the richest 20 percent reaps 55 percent of income and owns 80 percent of the wealth.[38] The richest 1 percent of US citizens possesses greater wealth than the bottom 90 percent.[39]

The combined wealth of the Forbes 400 richest Americans increased $114 billion during the 12-month period from September 1, 1997 to September 1, 1998 - an average addition of $285 million for each of those who were already wealthy. Put in terms of wages based on a 40-hour week and a 50-week year, which comes to $97,603 an hour, which is an hourly increase in their wealth at 18,416 times the federal minimum wage.

Between 1989 and 1997, 86 percent of stock market gains accrued to the top 10 percent of households while 42 percent went to the wealthiest one percent.

From 1983 to 1995 (the latest Fed figures), only the top five percent of households saw an increase in their net worth and only the top 20 percent experienced any increase in their income. Average wealth fell for everyone else. Median financial wealth (net worth less home equity) was $11,700 in 1997, lower than in 1989. In 1996, the Census Bureau reported record-level inequality; with the top fifth of households claiming 48.2 percent of national income while the bottom fifth has just 3.6 percent. Average middle class savings are enough to maintain the current standard of living for only 1.2 months, down from 3.6 months in 1989.[40]

The willingness and ability to work no longer guarantees an adequate standard of living. The share of US households with at least one child that were living below the poverty line despite having a full-time worker rose from 8.3 percent in 1975 to 11 percent in 1996, for a total of 3.65 million families.[41]

Cut the Pork

Clearly, there needs to be some major reshuffling of the ground rules of the economic game. Green tax reform can greatly reduce or eliminate the unhealthy predatory practice of taxing wage incomes and other forms of labor. Removing taxes from working people would significantly increase purchasing capacity while shifting taxes onto land and resources, the source of all tangible wealth, would prevent monopoly and speculation in the fundamental basis of life. Weaned off of the sweat and blood of working people and put on the proper diet of natural resource revenues and pollution fees, the nations should be able to efficiently meet the basic minimum governing requirements of all their citizens.

On the way there, we have a major weight reduction program looming. The wealthfare state has created substantial transfer payment programs in the form of subsidies for the already wealthy. Much unsustainable and inefficient economic activity is actually paid for by government. There are numerous subsidy programs that may have been helpful in the past but have outgrown their intended purposes and now represent a privileged largesse from the public trough. Eliminating tax drains by removing these subsidies is another key green tax shift strategy.

Tax shifters are pushing for and succeeding in the elimination of billions of dollars of subsidies that are deemed no longer essential. Subsidy elimination campaigns are underway in Europe and North America. In the US, the Green Scissors Coalition, an alliance of environmental groups and conservative tax cutters led by activists from Friends of the Earth, Taxpayers for Common Sense, and the U.S. Public Interest Research Group (PIRG), is lobbying Congress to save taxpayers nearly $51 billion by cutting federal programs that harm the environment and waste money.

Green Scissors has succeeded in getting Congress to cut more than $24 billion in wasteful and environmentally harmful spending programs since 1995.

Subsidies targeted by the Green Scissors '99 campaign include:

- **Money-Losing Timber Sales** Requiring the Forest Service to stop subsidizing timber industry clearcuts on National Forests would save $555 million and stop promoting the destruction of our Forest Heritage.
- **Coal and Oil Research and Development** Eliminating the coal, petroleum, and diesel research programs that benefit large, profitable fossil fuel and auto companies would save $1.6 billion and reduce subsidies that encourage global warming.
- **Wasteful Water Subsidies** Eliminating federal subsidies for water projects would protect the quality of our drinking water and wildlife habitat and protect taxpayers. For example, cutting the environmen-

tally damaging Animas-La Plata dam and irrigation project would save taxpayers $503 million. Reducing the budget for the Army Corps of Engineers' ineffective and harmful flood control construction program would save $1.25 billion.

- **Wildlife Services Livestock Protection Program** Slashing funding for ineffective attempts to control wolves, coyotes and other predators for western ranchers would save taxpayers $50 million.
- **Diesel Engine Research for Cars and Light Trucks** Eliminating research funding for diesel engines, which emit harmful levels of air pollution, would save taxpayers $220 million.
- **Radioactive Recycling Subsidies** Canceling the Department of Energy's noncompetitive contract to "recycle" radioactive metals and other atomic weapons and nuclear power wastes into consumer products would save $251.6 million.

"These outrageous programs flatten our forests and our pocketbooks, drain our rivers and the Treasury, contaminate the environment and the democratic process," says U.S. PIRG Staff Attorney Lexi Shultz.

Pay For What You Take, Not What You Make

Behind the front lines of the subsidy-cutting revolution, Redefining Progress think-tankers are devising several scenarios for federal green tax shifting for the United States. Taxes or fees would be increased or new taxes levied on carbon, air pollutants, gasoline, virgin materials, public resources, water pollutants, electricity, natural gas, coal for industrial combustion, and residential fuel oil. Increased revenue from these sources would permit major tax reductions on income and payroll taxes and also significant decreases on business taxes and some forms of capital gains, such as on new tax investments and home sales.[42]

Many green tax theorists avoid issues of how collected taxes should be dispersed and distributed. To state opinions on how public funds are spent could raise additional controversies and divert the debate from the important tax shift focus on tax sources. Most tax shift scenarios are therefore carefully crafted so as to be revenue neutral, projecting the same amount of tax revenues as is currently collected.

While the revenue neutrality approach may work well for tax shifters intending to gain political leverage on federal levels, this writer is at liberty to make one further nation state dietary recommendation. The world would be safer, saner, and more secure with a major weight loss program for bloated, bulging military budgets. Additionally, since green taxation presents an equitable approach to sharing the world, territorial conflicts could much more readily be resolved by peaceful means.

Several tax shift models indicate that some nations could fully substitute income taxes with resource rents. Calculations show that 17.5 percent of national income is the rental value of land and natural resources for the UK. For 1996, national income in that country was 675 billion pounds, (using the United Nations numbers) which gives a land rent of 118 billion pounds. Further, factoring in 108 billion pounds as the estimated value of government services provided by the state as the entity in sovereign control of the land, which can be considered as also coming out of land rent, then the total land rent for UK comes to 226 billion pounds. This is 33 percent of the National Income of 675 billion pounds, which is thus sufficient to wipe out all UK taxes on income.[43]

For the purposes of local-to-global tax harmonization and integration, the argument for shifting some resource rents and pollution fees upwards to the global and a substantial portion downwards to strengthen the local base means a significant decrease in overall federal taxation for most nations.

Responsible Decentralization – Stronger Local Economies

While top-heavy federal tax policy has enriched the rich, burdened the poor, and flattened the middle class, cities have declined along with the people in them. The poverty rate in central cities increased from 14 percent in 1970 to nearly 21 percent in 1993, according to the 1995 US Bureau of the Census. In Atlanta, which ranks second among America's big cities in its rate of violent crime, 43 percent of the children in its central city live in poverty.[44] Detroit has lost 50 percent of its population and 40 percent of its job base in four decades. Philadelphia and Washington have lost respectively one quarter and one fifth of their populations in the last 25 years and contain tens of thousands of homeless.

Despite rising GDP, many indicators of American quality of life are falling. The Index of Social Health, published each year by Fordham University in New York, combines 16 measures of well-being into a single numerical index. Since 1970, America's social health has fallen more than 45%. In 1993, the most recent year for which data is available, six of the indicators - children in poverty; child abuse; health insurance coverage; average weekly earnings; out-of-pocket health costs for those over 65; the gap between rich and poor - reached their worst recorded levels.[45]

While cities die, billionaires thrive. The pay of top earners is now 212 times higher than that of average employees, up from a multiple of 4 in 1965. During 1995, salaries and bonuses of chief executives in the US rose by 10.4 percent compared to a 2.9 increase in average earnings.[46]

In 1975 there were 350,000 millionaire households (0.5 percent of all households). In 1996 there were 3.5 million millionaire households (3.5 percent of all households).[47] In 1929 there were two billionaires. In 1944, after Roosevelt's Great

Society programs were put in place, there were no billionaires. In 1978 there was one billionaire, but by 1994 there were 120.[48]

Downshifting the tax base can provide a strong and sustainable source of public finance for our ailing cities while making sure that everyone pays their fair share for the land sites they hold. A type of tax shifting that is particularly suited to the local level can largely remedy the sick social conditions in the urban cores. The place to look is the frequently maligned property tax. A fundamental green tax shift reform of the property tax has the potential to transform the world's cities into places of safety, functionality, beauty and prosperity for all. But the incentive capacity of the property tax has to be realigned.

Currently the major portion of the property tax falls on buildings, thus discouraging renovations and improvements to the built environment. A lessor portion of the property tax falls on land values, which part can be rightly viewed as a resource rental fee. Urban sites are valuable as places of production and exchange. Undertaxed, urban site rental incomes accrue to the few who own these valuable sites without any compensatory labor on their part. The private appropriation of site rental values can be viewed similarly to the private profits that accumulate from the extraction of oil, minerals, and other natural resources.

Taxing surface land falls in line with other forms of green tax shifting and contains a special boon for decentralizing economic and political power to the local level. Shifting taxes off of buildings and onto sites will decrease land speculation and encourage higher and better use of urban lands, which often now have large swaths of boarded up commercial and residential buildings or are entirely vacant. Additionally, more intensive use and reuse of already serviced urban land sites will reduce sprawl and increase efficiencies of scale for infrastructure and public transportation, all desirable environmental objectives.

The late Nobel Prize winning economist William Vickrey of Columbia University was a strong proponent of a land value only form of property tax. "Site value taxation in the long run tends to diminish urban sprawl, increasing densities and site values at the center and usually diminishing them at the periphery."[49]

Currently the property tax is a relatively small proportion of all taxes and weighs more heavily on buildings than on land values. In Western Europe, real estate taxation generates about 5 percent of tax revenue. Property is more heavily taxed in the US, Canada, and Japan, yielding about 12 percent of revenue, but again land values are underassessed relative to buildings. David Roodman of Worldwatch Institute says that "If property taxes in North America and Japan were replaced with pure land value taxes and if land value taxes reached the same level in the rest of the world, they could generate 12 percent of global tax revenue, or $900 billion a year.[50]

While this is an impressive number, since global tax revenue is estimated to be about $7.5 trillion, this is a relatively small percentage of the overall tax yield. Other calculations show that a full land value tax could generate a significantly greater proportion of taxes.

A study by the New Economics Foundation in London calculated that half the tax revenue in the UK - some $140 billion a year - could be raised through a land value tax set at 75 percent of annual rental value. Ninety-eight percent of this would come from land used for housing, offices, factories, or mining, not for farming. Combined with a sizable energy tax, this could fund the abolition of all taxes on income, payroll, sales, profits, and buildings and also pay for a "Citizen's Income" in the form of stipend checks for several hundred or thousand pounds for each resident each year.[51]

Land value taxation (also called "site rental public revenue") appears to be a potent green tax shift tool, based on some real-world experience in its application. For example, fifteen cities in Pennsylvania are reforming their tax base via a property tax reform that shifts taxes off of buildings, to encourage construction and improvements, and onto land value, to discourage land speculation and poor site use.[52] An added advantage is that sites maintain affordability of access.

Harrisburg's Mayor Steven Reed, in describing his city's remarkable recovery from "second most distressed city in the USA" by official federal criteria, has stated that the shift to land value taxation "has been and continues to be one of the key local policies that has been factored into this initial economic success here." A substantial decrease in vacant structures (over 4200 in 1982, less than 500 currently), significant increase in well-employed city residents, and lowered crime and fire rates are among the several quality of life indicators which affirm the positive benefits of this tax reform.[53]

Interestingly, this basic approach to local public finance underlies the success of a number of countries ranking high on the Index of Economic Freedom. Compiled by the Wall Street Journal and the Heritage Foundation, this index assigns scores for ten areas including taxation and property rights. Hong Kong is on top of the 1998 list. Hong Kong's land has been in the public domain since it's founding in 1983. It is leased to users via auctions and this revenue funds government services. Singapore ranked second in the Index and that state also holds most of the land in the public domain. New Zealand placed fourth after oil-revenue rich Bahrain, and it, too, has relied heavily on the rent of land as public revenue. In seventh place was Taiwan, a country that also draws a significant proportion of public revenue from the rent of land.[54]

As has been seen, the income tax is no longer a genuinely progressive tax. A land value tax IS a progressive tax because the share of wealth that is land tends to increase with total wealth. As described by land economist Mason Gaffney, the land tax is progressive for two reasons:[55]

- It is not shifted, so only an owner and not a tenant bears it.
- The ownership of land is highly concentrated. As a consumer good, land is a superior good and a status symbol. And as investment, land promises capital gains type income with minimal management problems, traits that attract the wealthy buyer.

The richest 10 percent of Americans own 60 - 65 percent of private land by value, calculates economist Clifford Cobb of Redefining Progress.[56] This figure includes land indirectly owned through corporations. By area, it is estimated that 3 percent of the population owns 95 percent of the privately held land in the US.[57] In Brazil, the wealthiest 1 percent hold title to half the countryside.[58] Those who profit from control of land resources are wealthy as a group all over the world.

As the world's economies have become more intertwined, large asset holders have been able to shuttle their wealth to low tax or tax free zones in other countries. The elimination of taxes on labor and productive capital would eliminate the problem of offshore tax evasion. No tax to evade equals no tax evasion. An advantage to taxing in-place tangibles of land and natural resources is that they cannot be easily hidden.

"Since a plot of earth can never sidle across a national border to avoid taxation, (taxing) natural resources give governments a sort of protective barrier against the corrosive forces of international tax competition," says David Roodman.[59]

Global Resource Agency

But there is another level of competition and exploitation fast underway. The 20th century has opened vast new frontiers that promise great wealth and power to those with the technology to stake a claim. These new territories lie beyond the jurisdiction of national governments. If issues concerning their use and ownership are not addressed at the global level, they may overwhelm all our efforts to strengthen local economies.

The thinking of academicians and policy makers concerning the so- called "new global commons" strives to direct supranational decision making on the grey areas of global real estate: the earth's ozone, deep seas, 'biodiverse' reserves, the North and South poles, the air waves.[60]

These are not "grey areas" for tax shifters like Land and Liberty editor Fred Harrison, who gives dire warning regarding future territorial expansion, seen not as horizontal but vertical territory. "...shifting into gear is the quest for the rents of outer space and the rents of natural minerals below the surface of the ocean beds. And there are also the rents from our genes..."[61] These are global common heritage domains whose resource rents should be captured for the benefit of all, not pillaged for private profit.

There is an urgent necessity for the creation of a Global Resource Agency responsible for monitoring the global commons (e.g., the ozone shield, global forest reserves, fish, biodiversity) determining rules for access, issuing permits and collecting resource revenues. Such a body could also assume substantial authority for equitably distributing fees collected and levying fines and penalties for the abuse of common heritage resources.

There are numerous domains for raising global revenue.[62] One of the main categories are fees for the use of the global commons, which would include parking charges for satellites placed in geostationary orbits, royalties on minerals mined or fish caught in international waters, charges for exploration in or exploitation of Antarctica, and use of the electromagnetic spectrum.

Other significant global revenue sources include taxes or fees based on the polluter-pay principle, such as international flights or aviation kerosene, international shipping, or dumping at sea. Some would place a tax on the international arms trade. While not a user fee or pollution charge per se, taxes on weapons of destruction certainly would fall on the "bads" side of the "tax bads not goods" green tax ethic. Considering the damages due to war and violence, funds raised from arms trading charges might well be placed into contingency funds both for conflict resolution to prevent open warfare and for post-war reparations, although some advocate the abolition of the arms trade altogether.

Revenue raised from access fees for the use of the global commons could be used to fund necessary sustainable development programs, environmental restoration, peacekeeping activities, or as backing for low-interest loans to help eradicate poverty. Funds are also needed on the global level to finance justice institutions such as the World Court and the International Criminal Court and to facilitate policy convergence in areas such as trade, currency exchange, and human rights.[63] A portion of these funds could also be distributed as direct "world citizen dividends" similar to the Alaska Permanent Fund.

Are there signs of an emerging Global Resource Agency with the necessary legal authority suited to the tasks outlined above? Alas, the nation state system has not yet agreed to arrangements that would permit the United Nations or any other transnational body to operate with independent funding and thus be in a position of sovereignty over nations. But the emergence of such an agency is an imperative if we are to create a world that works for everyone.

Places to watch for how major players are now financing the planet are the International Monetary Fund (IMF), the World Bank, the newly established UN related Global Environmental Facility and the Global Sustainable Development Facility.[64] Places to look for components of a Global Resource Agency include the UN Commission on the Limits of the Continental Shelf and the Committee on Energy and Natural Resources for Development.

David Korten, former expert development specialist turned critic, suggests that the IMF be replaced by a United Nations International Finance Organization, empowered to write-off international debts, regulate international financial markets and currencies, balance trade accounts, and collect and administer a tax on foreign exchange transactions. Additionally, he advocates that the World Bank be closed, as its main role has been that of creating indebtedness of poor countries.[65]

While some national governments, backed by vested interests that are profiting from the current system, might balk at the idea of a Global Resource Agency, many others would find it a welcome institution if it were truly capable of promoting stability and economic equity for their peoples. The push for its creation may have to come from a unity of these countries plus a powerful network of non-governmental organizations (NGOs), similar to the kind of organizing it took to establish the International Criminal Court in 1998.

Some people might object to the idea of a Global Resource Agency out of fears that it would add another top-heavy level of bureaucracy to an already governmentally burdened world. But those at Global Education Associates, a UN-affiliated NGO focused on building better world institutions, and others who favor strengthened global governance ask us to imagine the shape of the emerging world as a pyramid with three basic levels: a small tier at the top for global institutions, a greatly slimmed down second band of national governments, and a vast sturdy base of local governance.[66]

Local to Global Public Finance Tiers

Green tax reform has the potential for becoming a comprehensive and universally accepted approach to public finance policy that can readily be integrated into such a three-tier system of local-to-global governance. Suitable tax bases for the funding of cities, regions, and states and at the global level can be clearly delineated through identifying appropriate tiers of common heritage domains. The following descriptions of these public finance tiers will serve to summarize the main points that have been expounded in this paper:

Surface land values, such as sites for homes, business and industrial activities, are well suited to finance towns, cities, counties and townships. Progressively shifting taxes OFF OF productive efforts such as building homes, working and organizing businesses, and ON TO land values prevents land speculation and monopoly, thus keeping land affordable while workers keep what they have earned in the process. This type of full-on green tax shift also would be recommended for rural areas where it has potential for non-coercive land reform which could underpin the transition to organic farming and a revitalized rural "eco-village" culture.[67]

State, regional, or national bodies are best constituted to collect user fees for forestry, mineral, and oil resources. For nations with significant amounts of public lands, user fees for grazing, timber, or mineral extraction would be significantly increased. The electromagnetic spectrum would be leased via auction rather than being given outright to the private sector. Precise configurations for the allocation of resource rentals between the state, regional and federal levels would vary according to the situation of particular nations.

Globally, as aforementioned, there is the need to establish some sort of Global Resource Agency to collect user fees for transnational commons. The Global Resource Agency could also be responsible for distributing resource revenues equitably throughout the world as calculated by formulas based on population, development criteria and currency purchasing capacity. Revenues collected would also provide the funding for global agencies responsible for justice, peacekeeping, and fair trade.

Percentages of total resource revenues collected could be disbursed up or down these several tiers based on criteria of equity, as some nations and regions of the earth are better endowed with natural resources than others. Freedom to live or work in any part of the globe would also further equality of entitlement to the planet.

The Earth is the Birthright of All People

It is overly simplistic to view the world as being divided between the rich North and the poor South. In the North there are significant numbers living in poverty and despair while in the South there are those with the riches of royalty. The structural systemic problem of the misdistribution of wealth is a global phenomenon. The 358 billionaires with a combined net worth of $760 billion - equal to the poorest 2.5 billion people of the world - have profited from the virtual enslavement of everyone else.[68]

Taxes structured along these lines would do much to level the economic playing field worldwide, both within and among nations. A coherent and integrated local-to-global green finance system would fundamentally alter the status quo and would give every person a stake in the planet as a birthright. With basic needs securely met for all, humankind would be free to advance to a higher dimension of expression and realization.

We can do no better than to end this paper with a quote from a great tax shift pioneer, visionary, and planet champion, Fred Harrison:

> "Privatized rent is the last great injustice inherited from the earliest civilizations. The anti-social prejudices that protected it through four millennia ought not to be tolerated by any society with a claim to being democratic and governed by principles of justice. The Challenge of the Millennium is to empower people to convert a legacy of trillion dollar losses into the riches that would finance the social and environmental needs of all nations in the 21st century."[69]

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[44] Hamond, op.cit. 23.

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Dave Wetzel, Annie Goeke, Heather Wetzel and Alanna Hartzok at the UN Habitat World Urban Forum in Vancouver, 2006. Dave, Vice-Chair of Transport for London, UK, is holding a copy of J.W. Smith's book, *Money: A Mirror Image of the Economy*.