APF – Room for Improvement?

Can the Alaska model be applied on a worldwide basis?

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When considering the question of whether or not the Alaska model can be applied on a worldwide basis it is necessary to consider both the strengths and shortcomings of the Alaska Permanent Fund as currently constituted. While several components of the Alaska Permanent Fund could and should be replicated elsewhere, there are a few important aspects of the fund that need to be modified when applied to establishing similar new agencies elsewhere. Let us first consider the several positive aspects of the fund which should be retained when establishing new funds.

The legality of the fund is firmly embedded in what Wally Hickel, the second and eighth governor of Alaska, termed an “owner-state” approach to governance. As stated in the Alaska state constitution: “all the natural resources of Alaska belong to the state to be used, developed and conserved for the maximum benefit of the people.” Provisions in Alaska's Constitution require that the state’s commonly owned 103 million acres of state land and resources be used for the maximum benefit of the people of Alaska. The APF, established to equitably distribute oil resource rent[[1]](#footnote-1) to the people of the state, was based upon these principles.

The process of establishing the fund was broadly democratic. Following a period of public debate and input, in 1976 voters approved a constitutional amendment, proposed by Governor Jay Hammond and modified by the legislature, which stated that “at least 25% of all mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue-sharing payments, and bonuses received by the State shall be placed in a permanent fund, the principal of which shall be used only for those income-producing investments specifically designated by law as eligible for permanent fund investments.”

There is a high degree of transparency concerning both the administration of the fund and investment details. The fund’s easily navigable website[[2]](#footnote-2) is up-do-date, educates the citizen about the f[[3]](#endnote-1)und and permits questions to be asked to which staffers respond individually.

The right to receive dividend payments is determined by the simple requirement of one year of residency in the State of Alaska. A person may leave the state for purposes of education or military service as long as they do not take up permanent residency elsewhere. He or she must return to Alaska every two years and remain in the state for at least 72 consecutive hours in order to continue to be eligible for the dividend. The annual citizen dividends, gleaned from interest payments accruing from the fund’s investment portfolio, are sent in checks of equal payments to everyone meeting this requirement.

As the dividends provide a significant amount of additional income for individuals and families, there is strong citizen interest in and support of the fund. Since the other 75% of Alaska’s resource royalties fund a large portion of the state’s budgetary requirements, Alaska has no need for personal income tax, further enhancing the financial capacities of the citizenry.

There are other important elements that enable the Permanent Fund Dividend (PFD) program to function that are rarely mentioned in the literature. Alaska, as is true of most of the “developed” world, has an enabling postal, banking, and information technology infrastructure. Without a postal system capable of providing accurate name and address information, surety that checks will be delivered to recipients in a timely manner, and a banking system that enables checks to be cashed, the dividend program could not be administered in a fair and efficient manner.

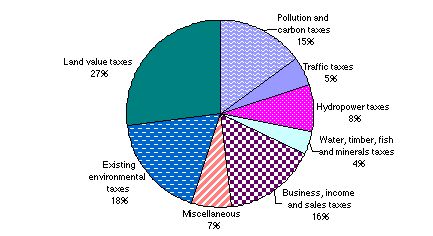
All of the above features should be replicated when establishing new resource rent based dividend funds. The only exception is that the decision to allocate “at least 25%” of resource royalties and rents is specific to the APF. Decisions regarding the exact percentage of how much revenue should be placed in a permanent investment fund versus how much is to be utilized to finance state budgetary needs should be made on a case by case basis, with a requirement that such decisions be made via broad citizen input. Additionally, rather than fixing the percentage thereafter, this decision could be reviewed periodically, perhaps every five years, and modifications would then be made, again after a period of broad citizen participation in the decision making process.

Citizens should not only play a significant role in determining the percentage of resource rents and royalties to be used to finance government budgetary needs versus the amount to go into dividends, there should be citizen input in determining those government budgetary needs as well. We now have working examples of this in the growing Peoples Budget movements in Brazil and elsewhere whereby citizens vote for line items of up to 50% or more of their city’s budget.[[4]](#footnote-3)

A “best practice” model for future funds would be to monitor and inform regarding the exact mechanisms and formulas used for determining the amount of resource rent being collected. This methodology should also be reviewed and revised on a periodic basis. Best practice models can also be established based upon the experiences of other currently functioning resource rent or “sovereign wealth” funds.[[5]](#footnote-4)

Since the establishment of the APF more than 30 years ago there have been conceptual breakthroughs regarding how this type of fund fits in with what could be called a “holistic integrated green tax shift” paradigm of public finance.[[6]](#footnote-5) One of the best models was first put forth by Northwest Environment Watch (now Sightline Institute) and included several other resource rent domains, such as taxing emissions into air, water or soil; surface land sites according to land value; charging fair fees for water, timber, fish and minerals extraction. The goal is to “tax bads, not goods” by utilizing the incentive mechanisms of tax policy to augment social and environmental betterment. The Vermont Green Tax and Common Assets Project provides a more recent and impressively detailed green tax shift model.[[7]](#footnote-6)

Those leading movements to establish future resource rent funds should familiarize themselves with these holistic and integrated approaches in order to bring to the fore the new economics paradigm for public finance policy. Once the blueprint is in place conceptually, the details for implementation can be fleshed out step by step and stage by stage. Here is a diagram of the proposed “green tax shift” for the Pacific Northwest as put forth by Sightline Institute:



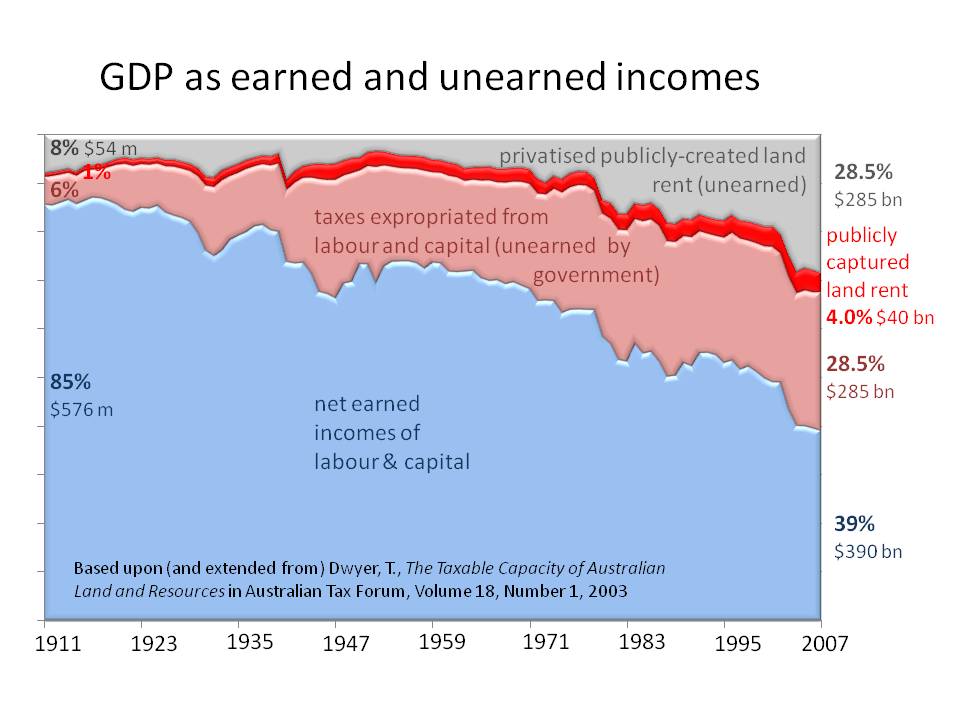
The lack of a holistic green tax shift paradigm accounts for weaknesses and flaws in the APF model. The fund is frequently criticized by environmentalists who maintain that distributing dividends sourced from petroleum aligns the people with the interests of those engaged in polluting, non-renewable extractive industries. There is likely some truth in this as the preservation of Alaska’s natural heritage, such as the Alaska National Wildlife Refuge, could reduce the opportunity for Alaskans to increase the APF and hence the amount of their dividends. A carbon tax or other green tax on the environmental degradation often caused by resource extractive industries might also reduce the incentives of corporations to operate in the state. But without a commitment to shifting to renewable forms of energy, Alaskans may end up with higher energy costs and worsened environmental conditions in future. Utilizing a substantial portion of oil rent to invest in the shift to renewable energy, either developed by the state or via low interest loans to the private sector, would address this concern.

Capturing surface land rent for funding dividends might be a much better approach overall. Surface land is of course, also a commons. Land value taxation (capture) policy can be understood as a fee for private enclosure of surface land. As demand increases for prime land sites the value of land steadily increases. As a community grows, as schools are built, and as transportation, sanitation, and other infrastructure is put in place, the value of land increases.[[8]](#footnote-7)

However, in most places in the world this increase in land values accrues to land owners only, while those seeking to buy land must pay an ever higher price and face higher mortgage payments as a result. The better the location or the greater the amount of land owned, the more landowners benefit. Landowners may be local or absentee, individuals or financial services, such as real estate investment trusts holding land for the purposes of profiteering and speculation. To create a fair economy we must realize that land value is socially created, and thus a commons asset, and should be used to benefit society as a whole via financing public goods and services, direct dividends, or some combination of the two.

While dividends increase the amount of funds in people’s pockets, when land values increase faster than wages, then the proportion of citizens’ wealth spent on housing and other basic needs will increase, essentially “sopping up” the purchasing capacity gained by the dividend.   
Classical economist David Ricardo described this phenomena in his writings on the “law of rent,” an important line of thought further developed by Henry George in his masterwork Progress and Poverty. Because of this effect dividends sourced from a commons domain other than surface land value should always be combined with a land value taxation public finance approach.

Alaska’s constitutional mandate - that “all the natural resources of Alaska belong to the state to be used, developed and conserved for the maximum benefit of the people” – should be understood to include surface land. Land rent is likely to be a significant source of funds that could be shared by the people of Alaska, especially when the oil runs dry. Researchers in Australia have calculated that this largely untapped potential source of dividends is as high as one third of GDP. The diagram below shows that (1) public finance drawn from land rent can provide a sufficient source of funds for public needs; (2) as a proportion of GDP, resource rent increases while returns to labor and production decline, thus validating the functioning of the law of rent; and (3) dividends from oil and other extractive resources will assuredly and steadily result in an increase in surface land rent as does any other increase in purchasing capacity and productive power.



The terms “land value taxation,” “land value capture,” and “site value rating” all reference the public charge of a fee for use of surface land in lieu of taxes on homes, buildings, wage income and production of goods and services. Not only is the potential public revenue from surface land rent significant as an amount, the incentive effects are impressive. For example, when surface land rent is collected for social benefit:

* Land is freed from socially harmful incentives for profiteering and land speculation, and thus maintains affordability.
* Affordable land means more people in a locality can access land upon which to labor by establishing local businesses, building homes, growing food, and securing energy from solar, wind and wood.
* When land costs are lowered and remain stable, more funding is freed for capitalization of local businesses, whether they be cooperatives, community corporations, or individual or family owned businesses. Lower land costs mean lower mortgage payments as well.
* Land rent is a substantial sum that can pay for education, healthcare and other public infrastructure.
* Urban land sites are better utilized. Sprawl is curtailed because this public finance approach encourages “infill development.”[[9]](#footnote-8)

It is important to understand that APF dividends are drawn from the interest accruing to the investment of the state’s oil revenue. The structure of the APF investment portfolio may well be the most problematic component of the APF model.

The APF website states:

* The investment goal of the Board of Trustees is to produce an average annual real rate of return of 5 percent over the long term. To achieve the target return, each year the Trustees set a target asset allocation that determines the types and percentages of investments.
* Over thirty years the Trustees have gradually guided the Fund from a portfolio entirely in bonds to a portfolio that is diversified across asset types. As new investment opportunities appear, the Trustees evaluate these investments to determine if they will fit within the Fund’s risk and return targets.
* Fund assets are invested to earn income. As all investments carry some degree of risk, the fund is invested prudently to reduce the risk.

Alaska’s Constitution and state law set out certain requirements for the fund’s investments:

* The Fund can only invest in income-producing investments.
* The goal of the Fund’s investments should be to maintain the safety of principal while maximizing total return.
* All investments must conform to the prudent investor rule. This fiduciary standard requires that investment decisions be made with the prudence, intelligence and discretion expected of an institutional investor.

The fund is now so large ($38 billion as of December 9, 2010) that it has the power to capture significant amounts of resource rents and other unearned income from throughout the world. Within established foundation guidelines of the "prudent investor rule" the Trustees' goal is to earn slightly better-than-average rates of return with slightly below-average levels of risk. In other words, the fund is managed under normal investment procedures and criteria. And under normal investment rules, there are no established criteria for socially or environmentally responsible investing. In fact, the fund makes a special point that it minimizes risk and within that constraint maximizes investment yield and does not engage in "social" or "political" investing.

Established to secure common heritage rights to rents and royalties from the oil and natural resources of Alaska for the citizens of Alaska, the APF now draws resource rents from other territories. In other words, mandated by law to secure the continued prosperity of the citizens of Alaska now and into the future, the fund receives substantial payments from land and natural resources worldwide via fund investments in real estate and stocks, as profits from the latter also include substantial amounts of land and resource rent.[[10]](#footnote-9)

Although the fund states that it does not engage in social or political investing, the fact is that its status quo investment approach does indeed impact the social and political realities of people throughout the world. The APF website tells us that stocks are held in 59 countries and 60 sectors including oil, gas, coal and rubber. For example, the fund has made substantial investments in ExxonMobil and Chevron. Both companies have major investments in Nigeria, a country where most of the people live in dire poverty. A recent news story[[11]](#footnote-10) tells us that:

ExxonMobil has disclosed that it is investing over 2 billion U.S. dollars annually in the exploration and production of oil and gas reserves in Nigeria. But the company is not abiding by its agreements to hire and maintain indigenous workers. According to a news story:

The domination of the Nigerian oil industry by foreigners came under attack today as the Petroleum and Natural Gas Senior Staff Senior Staff Association of Nigeria (PENGASSAN) in Mobil Producing Nigeria (MPN) commenced an indefinite strike over the sacking of 84 Nigerian oil workers by the company. The workers, numbering hundreds, blocked the gates to the Qua Iboe Terminal at Ibeno, Akwa Ibom, as they reported for work at the facility.

The Nigerian oil workers in ExxonMobil’s Nigerian unit began the showdown with the management arguing that the sacking indigenous workers in the guise of cost-cutting is against Nigeria’s national interests and leaves the oil sector in the hands of expatriates.

They are accusing the oil firm of discriminatory labour practices that favour expatriates at the expense of indigenous manpower. The labour leaders said they were compelled to embark on the strike because the management of the oil firm sacked the affected workers unilaterally, without consulting the union, in violation of laid-down procedures. [[12]](#footnote-11)

Regarding the “investment climate” in Nigeria, Amnesty International reports:

Ten years after the internationally condemned executions of the "Ogoni 9," including Ken Saro-Wiwa, the legacy of human rights violations in the Niger Delta continues. Amnesty's recent report, "Claiming rights and resources: Injustice, oil and violence in Nigeria," calls particular attention to the human rights violations and failures of the Nigerian government, Chevron Corporation (CVX) and Shell Oil…. Despite video of beatings and independent observers accounts of violence, Chevron (CVX) has not lived up to its human rights responsibilities.[[13]](#footnote-12)

On the plus side, everyone in the world can view APF investment details, including addresses, maps and photos, on the APF website. All public institutions and corporations should display such a high degree of transparency.

Ultimately, the only rational, supportable, moral, just and ethical basis upon which the citizens of Alaska can assert a claim to the oil resources of Alaska is by birthright to the gifts of nature. And that cannot be an exclusive claim. The claim by birthright can only be legitimate if it is acknowledged that all other human beings have an equal claim to land and natural resources. The deepest ethical dimension of territorial rights recognizes that humanity is one and indivisible in its fundamental claim to the earth as a birthright of all.[[14]](#footnote-13)

Therefore the citizens of Alaska would do well to hold public forums to review APF investment criteria. They could consider establishing a broad humanitarian role for the fund in addition to the prudent investor rule. A potential outcome of such forums could be new directives requiring managers of the fund to invest in (1) the development of renewable energy technology; (2) strictly goods and services businesses and industries; and (3) in places and in ways that would support the emergence of forms of governance holding principles aligned with the primary goals of the fund, i.e., the collection and distribution of resource rent as a common heritage right for all people on an equal and democratic basis.

New resource rent funds, if they intend to distribute dividends from an investment portfolio, should be based on socially and environmentally responsible investment criteria. Portfolio investment managers can either develop their own protocols or simply place their investments with funds that have sustainable and responsible investment screens, such as Calvert Investments.

Our criticism of the APF is not meant to detract from the fact that it is a very important (and the world’s only) example of a state owned resource rent or “sovereign wealth” fund that distributes annual dividends. We have much to learn from both the strengths and the shortcomings of the APF as we work to establish new institutions that collect and fairly share the value of our local to global commons.

Let us be clear that governments should recover the maximum amount of the rent of extractive resources, meaning the surplus value beyond the costs of labor and capital. Governments should also establish, monitor and enforce environmental standards. Rent recovery can pay for these safeguards. A first step is to determine the specific amounts that corporations are currently paying governments for access to oil and other natural resources and how those funds are being spent. An unfortunate reality is that in a number of countries corrupt politicians are squandering the royalties that companies pay their governments. Information transparency[[15]](#footnote-14) will drive the next steps in forming resource rent funds.

NGOs and other citizen based organizations need to apply the same pressures for transparency to surface land, mapping who owns what land where and determining its value in terms of locational and other advantages. Calculations can give a rough estimate of how much could be available for citizen dividend payments, giving impetus for movements to implement land rent capture / land value taxation.

When green taxes and resource rent funds are implemented worldwide, there will be greatly reduced opportunities for people to be exploited by either internal corruption or external predatory forces seeking only to profit from access to natural resources. Governance will take the form of what might be called “earth rights democracy”[[16]](#footnote-15) whereby the needs of the people and the planet’s environment and other life forms are as important as profit, the so-called “triple bottom line.”

Wars are most often fought over the control of land and natural resources. In order to build a world of peace and plenty it is urgent that correctly and carefully structured resource rent (aka commons or sovereign wealth) funds that both care for the earth and share the economic surplus be established on all levels from local to global. Percentages of total resource revenues collected could be disbursed up or down these levels based on development criteria, as some nations and regions of the earth are better endowed with natural resources than others. Appropriate tax bases to fund cities, regions, states and up to the global level can be delineated as follows, with “polluter pay” green taxes levied at each level:[[17]](#footnote-16)

LOCAL:Surface land values, such as sites for homes, businesses and industrial activities, are sufficient to finance cities and towns.[[18]](#footnote-17) Surface land rent commons funds, which can be created by a relatively simple restructuring of local property tax systems, also would be recommended for rural areas where it they would advance non-coercive land reform which could underpin the transition to organic farming and a revitalized rural 'eco-village' culture.

REGIONAL*:* State, regional, or national bodies committed to transparent and fair governance could and should create resource wealth funds that collect user fees for forest, mineral, oil and water resources while safeguarding the environment. Precise configurations for the allocation of resource rents between state, regional and federal levels would vary and should be determined by the discussion and input of citizens.

GLOBAL:A Global Resource Agency should be established with a mandate to protect and fairly share the global commons. Many of these territories lie beyond the jurisdiction of national governments and include the fish and minerals in the deep seas, the atmosphere/ozone, the North and South poles, the air waves, geo-orbital zones and other uses of outer space. Competition and exploitation of these territories and resources is fast underway. These vast new frontiers promise great wealth and power to those with the technology to stake a claim. Issues concerning their use and ownership must be addressed at the global level, before conflicts over them result in warfare. The resource rents of these common heritage domains should be captured for the benefit of all, not pillaged for private profit.

The Global Resource Agency would be responsible for monitoring these global commons, establishing rules and regulations for their use, and levying penalties for their abuse. The Global Resource Agency would carefully calculate the economic rent of these resources and charge and collect user fees. The funds generated from these global resource revenues would be distributed throughout the world based on population, development criteria, and currency purchasing capacity. Revenues collected would also provide funding for global agencies responsible for justice, peacekeeping, fair trade and sustainable development. We propose that the UN Trusteeship Council be repurposed with this task.

Revenues raised from access fees for the use of global commons could fund sustainable development programs, environmental restoration, peacekeeping activities, or low interest loans for poverty eradication. 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.

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 which would permit the United Nations or any other transnational body to operate with independent funding. But the emergence of such an agency is an imperative if we are to create a world that works for everyone. Places to look for components of a Global Resource Agency include the UN Commission on the Limits of the Continental Shelf, the Law of the Seas Treaty, the Moon Treaty and the Committee on Energy and Natural Resources for Development.

While some national governments, backed by vested interests which 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 people and for all the people of the earth. 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.

While some national governments, backed by vested interests which 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 progress and stability for their people. The push for its creation may have to come from a unity of these countries plus a powerful network of non-governmental organizations, similar to the kind of organizing it took to establish the International Criminal Court in 1998. Currently former Irish president Mary Robinson is calling for the creation of a Global Climate Justice Fund.[[19]](#footnote-18)

Dividends could be issued at any or all of these levels, local state/regional, and/or global. The exact percentage of the collected resource rent fees to be distributed as dividends or to be allocated for financing public goods and services and/or for environmental restoration should be determined via informed participatory democratic processes. Recent breakthroughs in information technology can greatly facilitate the establishment of commons funds. Compiling accurate information and making it available on websites will require a core of dedicated people from around the world. They will be inspired by knowing that their work is to secure the birthright to the earth for each and every person.

In summary, responding to the question of whether or not the Alaska model can be applied on a worldwide basis, the viewpoint of this paper is yes, but with these several key modifications:

1. Fund investment criteria should be expanded beyond the prudent investor rule to include socially and environmentally responsible investments.
2. Extractive resource rent based dividend funds should be established as one component within a holistic, integrated green tax shift approach to public finance policy.
3. As economic development proceeds and surface land increases in value, dividends should be drawn increasingly from this source via land value capture/taxation policies while a substantial percentage of extractive resource rents should fund the development of renewable energy technology.

1. “Resource Rent” defines surplus profits, or earnings beyond the cost of labor and capital. [↑](#footnote-ref-1)
2. Alaska Permanent Fund website: apfc.org [↑](#footnote-ref-2)
3. [↑](#endnote-ref-1)
4. Deborah Brautigam, “The People’s Budget? Politics, Participation and Pro-poor Policy”, *Development Policy Review*, Overseas Development Institute 2004, Published by Blackwell Publishing, Oxford OX4 2DQ, UK and 350 Main Street, Malden, MA 02148, USA. http://www.unicef.org/socialpolicy/files/The\_peoples\_budget.pdf [↑](#footnote-ref-3)
5. For one such excellent report see: “Experiences with Oil Funds: Institutional and Financial Aspects, Energy Sector Management Assistance Program.” World Bank Group, Report 321, June 2006. [↑](#footnote-ref-4)
6. Alanna Hartzok, “Financing Local to Global Public Goods: An Integrated Green Tax Shift Perspective.” presented at the Global Institute for Taxation Conference on Fundamental Tax Reform sponsored by Price Waterhouse Coopers and St. John's University, New York, September 30, 1999 and published in *Taxation Alternatives for the 21st Century: Proceedings of the 1999 Conference*. [↑](#footnote-ref-5)
7. See “Green Tax Shift for Vermont.” *The Vermont Green Tax and Common Assets Project* , prepared byGary Flomenhoft, Research Associate/Lecturer, Community Developmentand Applied Economics/MPA Program and Gund Institute,University of Vermont, 2009*.* http://www.leg.state.vt.us/jfo/Tax%20Commission/Green%20Taxes%20-%20Flomenhoft%2012-2009.pdf

   MPA/CDAE and Gund Institute

   University of Vermont

   December 2009 [↑](#footnote-ref-6)
8. To gain a thorough understanding of this policy readers are invited to enroll in an online course on Land Rights ad Land Value Capture here: [www.course.earthrights.net](http://www.course.earthrights.net) [↑](#footnote-ref-7)
9. Alanna Hartzok, “Economic Incentives for Building Sustainable Local Communities,” presented at the Eastern Economics Association Conference, Philadelphia, February, 2010.

   [↑](#footnote-ref-8)
10. The author first wrote about this concern in an earlier paper on the APF: “The Alaska Permanent Fund: A Model of Resource Rents for Public Investment and Citizen Dividends.” In *Geophilos*, Land Research Trust, Spring 2002 and also here: <http://www.earthrights.net/docs/alaska.html> [↑](#footnote-ref-9)
11. “ExxonMobil Plans 2-Billion-Dollar Oil Investment Yearly in Nigeria.” Xinhua News Agency - CEIS, 17 March 2006. http://www.redorbit.com/news/science/432775/exxonmobil\_plans\_2billiondollar\_oil\_investment\_yearly\_in\_nigeria/index.html [↑](#footnote-ref-10)
12. “Nigerian Oil Workers Shut Down ExxonMobil Over Sack of 84 Nigerian workers And Expatriate Quota Violation.” Sahara Reporters, New York , 30 November 2010. http://www.saharareporters.com/news-page/nigerian-oil-workers-shut-down-exxonmobil-over-sack-84-nigerian-workers-and-expatriate-quo [↑](#footnote-ref-11)
13. “Chevron (CVX) in Nigeria: Claiming Rights and Resources.” Amnesty International.” November, 2005. http://www.amnestyusa.org/business-and-human-rights/chevron-corp/chevron-in-nigeria/page.do?id=1101656 [↑](#footnote-ref-12)
14. An online course on Land Rights and Land Value Capture can be found here: www.course.earthrights.net [↑](#footnote-ref-13)
15. For example, see the work of Transparency International here: http://www.transparency.org [↑](#footnote-ref-14)
16. Alanna Hartzok, “Democracy, Earth Rights and the Next Economy.” 2001 E.F. Schumacher Lecture, also published in The Earth Belongs to Everyone, Institute for Economic Democracy Press, 2008. [↑](#footnote-ref-15)
17. See: “A Green Tax Shift Policy Approach To Financing Local-To-Global Public Goods” <http://www.earthrights.net/docs/greentax.html> and “Financing Local to Global Public Goods: An Integrated Green Tax Shift Perspective” here: <http://www.earthrights.net/docs/financing.html> These are also published in The Earth Belongs to Everyone: Articles and Essays by Alanna Hartzok, Institute for Economic Democracy Press, Radford, VA, USA 2008. [↑](#footnote-ref-16)
18. Mason Gaffney, “The Taxable Capacity of Land.” *Land Value Taxation*. Government Law Center, Albany Law School, Albany, N.Y. 1993 pp. 59-82. http://www.wealthandwant.com/docs/Gaffney\_TCoL.html [↑](#footnote-ref-17)
19. “Former Irish President Mary Robinson Calls for Global Climate Justice Fund.” *Democracy Now*, December 06, 2010. http://www.democracynow.org/2010/12/6/fmr\_irish\_president\_mary\_robinson\_calls [↑](#footnote-ref-18)