

The Ruthless Recklessness of Initiatives like the Oil and Coal-by-Rail Export Terminals in the Pacific Northwest

By Mike Nuess



The public comment period for the largest proposed oil-by-rail project in the Northwest U.S. has closed and now Washington State's [EFSEC](#) must recommend a decision to Governor Jay Inslee. Tesoro-Savage's proposal is to ship 360,000 barrels of crude oil per day—four trains, each 1.5 miles long—through urban areas and along the Columbia River to the Port of Vancouver.

Another is Millennium Bulk's proposal for a coal export facility in Longview, Washington, the largest proposed coal-by-rail project in the Northwest. Washington State's Draft Environmental Impact Statement was scheduled for release on April 30, 2016 with a public [comment period](#) to follow.

These are but two of [several initiatives](#) for the extraction, transportation and export of coal, oil and gas from the western regions of the U.S. and Canada. They possess enormous inertial momentum and their cumulative effect would be disastrous at all levels—local, regional, national and global.

However, popular resistance grows [fierce](#) as citizens become increasingly aware of the intricate and extensive scope of the issue—again at all levels. And this understanding of both the stark potential for disaster (potentially species-terminal at the global level) and the exquisitely beneficial-to-all,

immediately available-to-all alternative can and must lead to a correction of course toward the right solution.

We are now at that moment when both the remarkable growth of efficiency and renewables and a tsunami of new investment enable the swiftest possible transition, which must not be forestalled by continued fossil or nuclear investments and subsidies.

I sought to contribute to that understanding by submitting the following comments to Washington State's [EFSEC](#) in January 2016 and presented them in the Mental Mouthfuls prose format so successfully developed by Buckminster Fuller. Here they are, slightly updated for the next round of comments:

Only if we expand
the boundaries of our scoping
can we simultaneously
solve this *survival-critical* matrix
of inter-related issues.

Only by thinking
comprehensively enough
to integrate all relevant
scientifically redemonstrable
evidence,
can we discover
we possess
a vastly superior alternative
to extracting, transporting and combusting
coal, oil, natural gas and uranium
for energy-production technologies.

Our exquisite alternative
mitigates and virtually *eliminates*
adverse fossil and nuclear impacts;
from the most serious
—either climate turbulence from
species-threatening anthropogenic carbon
or catastrophic releases of ionizing radiation—
to the more local and regional impacts of pollution

by mercury, lead, arsenic, sulphur dioxide, coal dust;
oil tanker leaks or explosions
in urban or sensitive environmental areas; etc.

Further, our alternative *mitigates*
the extremely dangerous impact of
the grievous, evermore foolish forestalling
of the *swift* and *necessary* deployment
of this *proven* and powerful alternative

—the *only* [comprehensively viable alternative](#)—

which is to deploy
an elegant mix
of efficiency and renewables
to achieve
sustainable energy abundance,
resilient economies with abundant jobs,
safe and healthy environments,
regenerative ecosystems
and durable peace.

Only efficiency and renewables
can mitigate and virtually eliminate
fossil and nuclear energy's
now reckless, ruthless, destructive,
potentially species-terminal
impacts
of irreversible climate turbulence,
nuclear waste and weapons proliferation,
costly and unhealthy pollution,
ecosystems collapse, and
increasingly intense conflicts over
ever-scarcer energy resources. (5)

Efficiency and renewables
are *proven*
to be safer and cleaner
more durable, flexible and resilient
more flexibly scalable,

cheaper and more jobs intensive,
than coal, oil, gas or nuclear;
and capable of delivering
universal energy abundance.

Germany,
Europe's industrial heartland,
a renewables leader,
now [has more solar workers](#)
than the U.S. has steel workers.

There are now [more jobs](#) per unit of delivered energy
and more people employed in solar, wind and efficiency
than in the fossil and nuclear industries.

“The world is now
adding more capacity
from renewable power each year
than coal, natural gas, and oil combined.” (6)

There's no going back.
But how fast can we go forward?
Since 1970 U.S. investments
in energy *efficiency* have
cut energy use per dollar of GNP
by well over 50%,
while increasing associated comforts and benefits:
things like warmer houses and safer cars. (4)
Today it's an engineering certainty
that we can more than double
our efficiency *again* by 2050. (2)

We've also been deploying
Ever-better renewable energy *generation*.

Back in 2007 the U.S. added more wind capacity
than it had added in coal-fired capacity
over the [previous 5 years](#).

For the 4 years prior to 2013

half the world's
new generating capacity
was clean renewables.
Also half in 2014 and 70% in 2015,
despite the one-sided \$490 billion
in [annual fossil fuel subsidies](#).

Installed wind capacity in the U.S.
[surpassed 60 GW in 2013](#),
adding more than that of over 50
average nuclear power plants,
or about 90 average coal fired power plants.
Allowing for conventionally assumed capacity factors
(thereby ignoring the fact that mixed types of
dispersed, distributed and forecast-able
renewables systems
will have much higher capacity factors),
this represents more generating power than
44 coal-fired power plants
or 11 nuclear power plants,
avoids emitting as much carbon dioxide as
taking 14 million cars off the road,
while saving 30 billion gallons of water a year,
costing less and delivering more jobs.
Installed wind capacity [keeps growing](#):
to over 74 GW by the end of 2015.

Way back in the 20th Century
Buckminster Fuller (RBF)—
the Leonardo da Vinci of our times—
assured us we could
transition to efficiency and renewables
[in just a decade](#).

This trend can and must continue
its swift acceleration.
Evolutionary economist Hazel Henderson
speaks encouragingly
of a *wall* of private investment
now surging toward

sustainable efficiency and renewables (7)
as they are safer,
lower risk investments
with quicker return.

In 2010, global renewable energy
(excluding large hydro)
got \$151 billion of private investment,
surging to \$270 billion in 2014
and \$329 billion in 2015 (6)
and surpassed the total installed capacity of nuclear power
after adding about 120 GW in just one year.
And now in 2016
our clean energy investments are
“seeing twice as much global funding
as fossil fuels.” (8)

Most significantly,
the world can now add
Upwards of 120 GW of renewable wind and solar *each* year,
roughly 30% of U.S. coal generation capacity,
or roughly the nameplate capacity of all 104 U.S. nuclear power plants.
Each year, this annual delivery capacity grows swiftly
—as it must.

The first five references below offer
sufficiently comprehensive and detailed
scientific studies,
two for the Pentagon (4,5),
for clarifying the physical and engineering
certainty and necessity of this alternative:

Scientific American published a study
detailing how wind, water and solar technologies
could provide 100 percent of the world's energy by 2030,
eliminating *all* fossil fuels. (2)

A *Stanford University* study
ranked energy systems according to their impacts
on [global warming](#), pollution, water supply

and other *so-called* economic externalities,
concluding that the very *best* options were
wind, solar, geothermal
and other clean renewables;
while coal (even *with* carbon capture)
and nuclear
ranked poorly. (3)

In 2011, a comprehensive and detailed
technical and economic
blueprint for transition
demonstrated available savings of \$5 trillion
over business as usual
by deploying an elegant mix
of efficiency and renewables,
for all uses,
to *completely* phase out coal, oil and nuclear by 2050,
while growing our economy more than 150%,
and reducing our carbon footprint by about 85%. (1)

Given this
expanded and comprehensive context,
it is evident
that extracting and consuming
fossil and nuclear resources
for today's energy production systems
is extremely harmful
possibly terminal for humanity,
and represents merely the utter selfishness
of far less than a tenth of a percent of humans
who, with the power of very deep pockets,
act in their *own* short-term interest,
as Adam Smith once observed,
“*regardless* of the impact on everyone else.”

Men and women currently working
in fossil and nuclear energy technologies,
are seductively surrounded by odes to their value
from these remote, ruthless profiteers—
the [Tesoros](#), [Enrons](#) and [Exxons](#),

the [Kochs](#), [Peabodys](#) and [JPMorgans](#), etc.—
who deceitfully seek their fealty
while readily exporting their jobs,
often to countries
where U.S. backed oligarchies
seek entry into the billionaire class
by violently suppressing
environmental and labor movements:
thereby maintaining
a “good business climate”
for their foreign investors. (9)

These men and women currently working
in fossil and nuclear energy technologies
can expect to find superior opportunities
in the emerging renewables-based economy:
jobs that are more abundant, stable, local and safer.
And, an informed popular demand
for economic justice
can streamline their personal transitions
by protecting their homes and pensions,
providing training and relocation services;
and thereby deploying
reliable and lucrative social investments
into the now emerging
renewables-based economy—
leading swiftly to
abundance for all
at the expense of none.

It is clear and certain now:
allowing Texas petroleum refiner [Tesoro](#)'s
Tesoro-Savage terminal,
[Hedge-fund](#) owned [Lighthouse Resources](#) Inc's
Millenium Bulk terminal,
and other terminals, extractions and power plants
would be reckless foolishness,
indicating that we humans
may yet prove ourselves to be
no wiser than

lemmings headed for the cliff,
failing to see
“it is now highly feasible
to take care of everybody on Earth
at a higher standard of living
than any have ever known.
It no longer has to be you or me.
Selfishness is unnecessary.
War is obsolete.
It is a matter of converting
the high technology
from weaponry to livingry.” (RBF)

Please evaluate this mitigating alternative
The *only* one that can deliver
abundance, safety and security
to all humans.
If you do, I’m confident
you’ll do all you can
to leave it in the ground.

Linked References:

- (1) Lovins, A.B. & Rocky Mountain Institute, ***Reinventing Fire***, Chelsea Green Publishing, VT, September 2011.
<http://www.rmi.org/ReinventingFire>
- (2) Jacobson, Mark Z. and Delucchi, Mark A. ***A Plan to Power 100 Percent of the Planet with Renewables***, Scientific American Magazine, November 2009.
<http://www.scientificamerican.com/article.cfm?id=a-path-to-sustainable-energy-by-2030>
- (3) Jacobson, Mark Z. ***Review of Solutions to Global Warming, Air Pollution, and Energy Security***. Department of Civil and Environmental Engineering, Stanford University, Stanford, California, June 2008. <http://www.solaripedia.com/files/398.pdf>
- (4) Lovins, Amory B., et al. ***Winning the Oil Endgame, Innovation for Profits, Jobs and Security***. Snowmass, Colorado: Rocky

Mountain Institute, 2005. http://www.rmi.org/Knowledge-Center/Library/E04-07_WinningTheOilEndgame

- (5) Lovins, A.B. & L.H., *Brittle Power: Energy Strategy for National Security*, Brick House, Andover MA, 1981.
http://www.rmi.org/Knowledge-Center/Library/S82-03_BrittlePowerEnergyStrategy
- (6) Frankfort School –United Nations Environment Program, *Global Trends in Renewable Energy Investment 2015*, <http://fs-unep-centre.org/publications/global-trends-renewable-energy-investment-2015> and Bloomberg Business, **As Oil Crashed Renewables Attract Record \$329 Billion**, <http://www.bloomberg.com/news/articles/2016-01-14/renewables-drew-record-329-billion-in-year-oil-prices-crashed>
- (7) Hazel Henderson, *It's Our Money with Ellen Brown – Is Your Money Better Off in a Mattress?*, <http://prn.fm/its-our-money-with-ellen-brown-is-your-money-better-off-in-a-mattress-11-25-15/>
- (8) Tom Randall, *Wind and Solar Are Crushing Fossil Fuels – Record clean energy investment outpaces gas and coal 2 to 1*. April 6, 2016. <http://www.bloomberg.com/news/articles/2016-04-06/wind-and-solar-are-crushing-fossil-fuels>
- (9) Greg Grandin, *The Clinton-Backed Honduran Regime Is Picking Off Indigenous Leaders*. March 3, 2016.
<http://www.thenation.com/article/the-clinton-backed-honduran-regime-is-picking-off-indigenous-leaders/>

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