Microsoft’s Plan: AI Runs on Gas

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Microsoft has joined oil-imperialists James Baker and George Shultz’ Climate Leadership Council (CLC). Their plan is to slap a $40 per ton tax on carbon emissions. In trade, it blocks further regulation, including liability, and disempowers alternative energy research.

The plan indemnifies the likes of Exxon, BP, Chevron, Shell, and others, sued by dozens of cities counties and states for burying proof and fabricating dis-proof of global warming.

Microsoft boasts its own plan (*AI for Earth*) to wean us off CO_2. Yet Microsoft is the first tech company to join the CLC plan to keep us hooked.

Why? According to Microsoft’s CEO (Chief Environmental Officer), Lucas Joppa: “We support a carbon fee because we believe it’s a policy mechanism that works and accords with economic principles.”[1] Which principles?

Carbon tax can be read in a lot of ways, a small hit to preclude a big one. A plea bargain, so gas doesn’t go the way of cigarettes. The slowest way to still nudge our economy toward clean energy. A PR budget. Or the going price for indemnity.

All misread it. A tax would neither cost them, nor open doors – even a crack – to alternatives. So far as “economic principles” go, taxes don’t curb misbehavior, they move it to a lower-taxed country. (Microsoft knows this. Foreign subsidiaries license software to Microsoft USA, earning them royalties that are not taxed by the US at all, nor by anyone at more than 3%. Microsoft does 85% of its work in the US yet avoids at least $2.5 billion in taxes.[2])

Sometimes taxes are a boon, because they target the weakest sector – coal, in this case. Then, instead of moving, companies just swap one racket for another. Unlike coal, gas prices aren’t much tethered to gas use, since like rent, you pay it or go without. Thus, a $40 per ton tax on emissions will likely *increase* gas use, since it will coax coal plants toward gas, but not gas to solar and wind, nor scrunch our cities to let us walk.

Americans would get paid for wheezing, but not a cent would go toward repair. The claimed rationale is that a rebate is the most-equitable option. Is cash really empowering? Aren't payouts notoriously regressive?

I'm sure they recall the work of Page and Gilens:

"Economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy, while average citizens and mass-based interest groups have little or no independent influence."[3]

We know already, the poorer you are the worse air you breathe. So, using some of that revenue to replace fossil fuels, undoubtedly favors the poor more so than giving them a few dollars more to buy gas with. Especially considering the poor tend to drive the most fuel-inefficient cars, commute the farthest to work, live closest to factories, and in the most congested areas.

And of course, when companies recoup their costs at the pump, the poor pay more.

Plus, payouts bankrupt the alternatives. They scatter the money, so it's not spent on research and development, education, infrastructure, public health, or remediation. Besides, doing those things would reveal the plans bigger secret: its price.

The social consequences, alone of current carbon emissions is around $220 per ton, according to research out of Stanford University.[4] That's just the cost of enduring it, nothing of rehabilitating our habitat, preventing more abuse, weaning us off it.

Ergo, given as rebate, further down our death spiral we can pretend it was squandered. Whereas, if it was gathered it would be much harder to hide that the money was never there in the first place.

But why does that interest Microsoft?

Microsoft currently charges itself a token $15 per ton (and spends a ton advertising it). Bill Gates told Thomas Pikety he didn't want to pay more taxes on wealth or profits and wants to tax consumption instead. Gates has invested considerably in "emissions capture," but it's not yet – and not proven – viable, and a gamble, since it doesn't reduce use. He's also published a carbon-reduction manifesto, the overall thrust of which sees clean air as a technological challenge, rather than a behavioral one.

In that vein, in 2017 Microsoft launched *AI for Earth.* As per their website: "AI for Earth awards grants to projects that use artificial intelligence to address four critical areas that are vital for building a sustainable future."

But sustainability doesn't inform Microsoft's AI policy. What does? "Economic principles."

A recent Brookings Institute paper (not affiliated with the CLC), *How artificial intelligence will affect the future of energy and climate*, noted the technology boom was in fact boosting fossil fuel markets faster than it was replacing them.

AI helps make markets more efficient and easier for analysts and market participants to understand highly complex phenomena from the behavior of electrical power grids to climate change. The author notes, for example, AI is particularly well-suited for mapping complex underground reservoirs and tailoring drilling methods required to mine oil and gas from shale. "The question is whether there is a 'bias' in how AI-related technologies affect energy supply, such as whether they're making traditional hydrocarbon suppliers more productive faster than they make zero-carbon renewables more productive.[5]

For example: Microsoft is behind Shell's much-promoted "machine learning push." Microsoft also builds custom AI tools for BP.

Microsoft has a 7-year, multibillion-dollar deal with Chevron to AI-enhance several of its operations, including ocean-floor well exploration and drilling. Microsoft's spokesperson explained: "The fact that it's a multi-year partnership really emphasizes that Microsoft is committing to work with its most important customers for the long haul."[6]

Microsoft has been outfitting Exxon, too. According to their press – release: The application of Microsoft technologies by ExxonMobil's XTO Energy subsidiary – including Dynamics 365, Microsoft Azure, Machine Learning and the Internet of Things – is anticipated to improve capital efficiency and support Permian (oilfield Basin in NM and TX) production growth by as much as 50,000 oil-equivalent barrels per day by 2025. Permian cooperation will "…serve as a model for additional implementation across the U.S. and abroad."[7]

In Saudi Arabia.

To backtrack a bit, James Baker III represents the Saudis through his law firm, Baker-Botts, with offices in D.C. and Riyadh. Saudi-Aramco funds the James Baker, III Foundation for Energy-Policy Studies; the Texas think-tank behind the CLC plan.

Saudi Aramco has pledged to increase its market share, and extend its dominance to other markets, as part of Saudi Arabia's *Vision 2030* program. Microsoft has signed on to both endeavors, in potentially its most lucrative AI deal so far.

Microsoft pitched its products to other regional players at an oil and gas trade show (ADIPEC 2018) last fall in Abu Dhabi. Per their press-release:

ADIPEC has become a key event on the calendar of the global Oil and Gas industry, gathering stakeholders and specialists from multiple disciplines for the purposes of knowledge exchange and collaboration. Microsoft's theme at this year's event is "Empowering Oil & Gas with AI." The company's booth is dedicated to showcasing solutions around artificial intelligence and Internet of Things and highlight how they can enable digital transformation within the industry – the means to engage customers, empower employees, optimize operations and reinvent business processes and services.[8]

Returning to "policy mechanisms that accord with economic principles," the simple answer is, it's much easier to broaden existing markets than it is to construct new ones.

We needn't look only to gas and AI for examples. Microsoft President, Brad Smith just had the Pope's ear about closing the global information gap. Yet, Microsoft collaborates with China's censors. Microsoft has called for restrictions on face-recognition technology used by law enforcement (mostly Amazon's). Yet it continues fundamentally similar work for the Military. Regarding its Army contracts, including weapons-targeting software, Smith said: "it's more productive to be engaged then disengaged in how AI is used."

Dwell here. According to lure, the market is – at least conceptually – neutral, and – history aside – cares the same for oil wells and windmills. Companies are all in myopic battle to poke their head above the crowd, and magically one crawling over the other constitutes a system. Whereby the poison ones – usually after they poison us – fade, and better ones replace them. But how, since we've already declared them solipsists, do they learn from each other's mistakes, and not just repeat them?

Comically, the vanguard in AI still smacks of the same, misreading (or misappropriation) of Darwin. That nature struggles to better itself (hence, so do markets), instead of just struggle. (This also, as far as I can tell, depicts our notion of "machine learning.") But it is a poor depiction, since, unlike the market or computer, nature has no specific obligations.

That's not hyperbole. A recent NYU Research Center report (published by the AI Now Institute, as one of 150+ studies with like conclusions), found AI is inheriting our prejudices. It concludes the industry's overwhelmingly white-male workforce has gifted us systems that perpetuate historic notions of hierarchy and race and gender biases. [9]

More likely, fossil fuels and capitalism have much deeper ties then we acknowledge (and so might AI). Historically, the two recurse like chickens and eggs. Mining and refining carbon fuels required enormous capital up front. And it's doubtful capitalists would have seen sufficient returns to expand their production, without the fuels themselves, to power more work.

Such large enterprise would not have occurred without some "policy mechanism" to protect the capitalists. Thus, they trained the still-emerging market to favor the fuel economy.

We can look at capitalism's (eventual) support for abolition, as example. But we can't believe the hype. Fuel was averse to a free-market, since the confidence to spend such large sums required strong-state protections – from liability and labor, but also from other power resources (like slaves and wind). Thus, think tank pitches that write the government out of the deal in no way signify deregulation. Rather they seat policy mechanisms more squarely with the investors.

And AI? In February Trump signed an executive order for the U.S. to promote AI:

"The United States must drive development of appropriate technical standards and reduce barriers to the safe testing and deployment of AI technologies in order to enable the creation of new AI-related industries and the adoption of AI by today's industries. …The initiative directs agencies to make Federal data, models, and computing resources more available to America's AI R&D experts, researchers, and industries."[10]

The Brookings report applauded Trump's "market approach to regulation," noting that "highly-adaptive technologies could help tamp down enthusiasm for regulation and make practical a greater reliance on market-based instruments such as carbon taxes."

Like Marx said, "machinery is the most powerful strikebreaker."

But there's still the matter of indemnity. Why, and why has Microsoft, so far, ducked the question? The topic's worth its own paper. Let me just stew the pot.

Last year a person was killed by a driverless car. Remarkably, no suit yet. But also, no rules pointing blame. Still, AI can expect ample questions of liability in days to come. There are already cases about AI's racial and gender bias, both use and errors in sentencing,[11] profiling, trolling, mistaken-identity, data-collection, and disinformation. There's considerable debate on how it factors in medical malpractice liability. No doubt, its role in climate-issues will appear on radar soon.

While Google, Facebook, (Microsoft-owned) LinkedIn, and several others repeatedly get caught doing things they swore not to, instead of fumble like Mark Zuckerberg, Microsoft has been vocal in its support for regulation. Makes sense, Microsoft was in federal court once and was –almost – subject to regulation.[12] So, it makes sense they'd want to be part of the discussion (better to be engaged).

The EU's General Data Protection Regulation (GDPR) begins to flesh out some rules for AI in Europe. Thus far, the U.S. has let the industry decide, here. That's not to say our government has remained neutral. Rather, the government has willfully let the corporations call the shots, as per Trump's AI executive order.

But the wiser move for the industry, rather than enjoy free reign, is to pounce on opportunity; i.e., park their own minimal (or minimally effective) laws in spaces meaningful laws – laws that favor the public and environment – would fit, otherwise.

Dennis Garcia, Microsoft's Assistant General Counsel said this:

"Since AI is still very much in its early stages, there are no meaningful AI-related laws or standards that can be relied upon—although given AI's dependence on data, applicable data privacy laws will be relevant. From a regulatory perspective, some may view AI as the Wild West. While this lack of an AI regulatory framework or standards can create some confusion and ambiguity, it does provide opportunities for lawyers to help build and develop this area from the ground up."[13]

In Brad Smith's words: "Only by creating a future where AI law is as important a decade from now as, say, privacy law is today, will we ensure that we live in a world where people can have confidence that computers are making decisions in ethical ways."[14] (Note he used "important," not "effective.")

Now consider, Trump's memo called for a "Federal action plan to protect the advantage of the United States in AI." To that end, the Department of Commerce is hashing plans to list artificial intelligence a "controlled export," it claims, due to national security concerns. [15] But Microsoft wants a seamless globe for its deals with Saudi Arabia, China, UAE, its tax shelters in Ireland, etc., etc., etc.

So, wouldn't de-fanging AI be a wise move? Besides, breaking laws ghost-written by lobbyists, likely won't incur fines big enough to discourage breaking them, anyway.

Finally, a principle that applies.

[1] https://www.theguardian.com/technology/2019/may/01/microsoft-joins-group-seeking-to-avoid-climate-change-lawsuit

[2] http://www.businessinsider.com/apple-microsoft-avoids-taxes-loopholes-irs-2013-1

[3] https://scholar.princeton.edu/sites/default/files/mgilens/files/gilens_and_page_2014_-testing_theories_of_american_politics.doc.pdf

[4] https://www.yaleclimateconnections.org/2015/02/understanding-the-social-cost-of-carbon-and-connecting-it-to-our-lives/

[5] https://www.brookings.edu/research/how-artificial-intelligence-will-affect-the-future-of-energy-and-climate/

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[10] https://www.whitehouse.gov/articles/accelerating-americas-leadership-in-artificial-intelligence/

[11] https://www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm

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[15] https://www.govinfo.gov/content/pkg/FR-2018-11-19/pdf/2018-25221.pdf