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There is a proposal for a northern BC oil refinery project. The Haisla nation chief Ellis Ross put a bid forward to win "social licence" from BC; Christy Clark has appointed him as a candidate in the May election. This gives a boost to Pacific Future Energy Corp's high profile team of executives & advisors one of which is her ex-husband, an expert lobbyist as that then being a conflict of interest, media questions have to go to finance minister. Pacific Future was created in 2014 promising to assemble the world's greenest bitumen refinery with near zero net carbon emissions. It would process 200,000 barrels of bitumen daily, with the gooey product being transformed to gasoline, jet fuel and diesel, they <sup>claim</sup> shipping bitumen to refinery by rail is safer than pipeline because by pipeline it has to be diluted - not by rail - if being of peanut butter consistency wouldn't flow anywhere in a dc railment but questions are arising about the ability to access carbon capture technology to reduce to near zero the projected 7M tons of carbon dioxide the refinery is projected annually. The Canadian Environmental assessment projected says that more than  $\frac{1}{2}$  of the carbon emissions will come from "flue gas" combusted gases generated by boiler heaters. These technologies are not currently in common use, so it's uncertain how much of the  $CO_2$  emissions from the flue gas will be captured. The Co. is sure they can meet its objective. Federal fisheries have cited 21 officially listed species at risk in that area from Leatherback sea turtle to a variety of whale species. These weren't mentioned in the Co. project description. First nations in the area have said there is not enough information on potential negative impacts of transporting refined products overseas on ships transiting the Douglas Channel from Kitimat. Other concerns are the rail line is next to sensitive environments. The Skeena Wild is concerned about the building of a 40k road over several tributaries of the Kitimat River - a high value spawning & rearing River & also

noted the risk of allowing refinery to take 48,000 cubic m of water daily from groundwater at the Kitimat R. for 60 yrs, at the same time dumping waste water in the Douglas channel. But supporters argue they need construction and refinery jobs in the area.

2/ We have been hearing a lot about zoos these days, as much as it's been said that they are needed <sup>for</sup> conservation and to educate the public about their role. But it is a lonely, cramped and frigid existence, degrading and sometimes cruelty is practiced. On the other hand animal welfare standards are improving and that isn't cheap. If it's good supposedly for education there are plenty of natural history documentaries in glorious HD. The animals are in their natural habitat and awake. Lots of people don't see the conservation that zoos do - not only through (captive) breeding but out in the wild. Revenues constitute the 3<sup>rd</sup> largest funding source for conservation efforts. They say they're not an attraction but a science-based, education based organization. The Vancouver Aquarium is well known for its rehabilitation & releasing sea animals and have recently opened a state of the art, \$544,000,000 hospital at its animal resource center, built entirely with private funds. Some zoos have done things like, turtle breeding; breeding endangered cranes (whoopy) & black footed ferrets, - breeding critically endangered freshwater fish from Madagascar & Lake Victoria in Africa. The Toronto zoo's ongoing revampment has built a new Wildlife Health Center, a state of the art medical facility. Visitors can watch surgery being performed on everything from rattlesnakes to lions and rhinoceroses. While the new zoo model is about science, education and conservation it's also a pragmatic capitalism displaying animals in captivity in humane conditions including the big ones from far away that people just want to gawp at like pandas which are a great draw; in order to make money for wildlife preservation at a time when scientists warn tens of thousands of species are at unprecedented risk. Over time some faraway big animals like elephants will probably disappear from zoos but the basic model seems entirely defensible: People will pay a lot of money to look at

animals in captivity and the money can be used to help animals in the wild. 60% of animal populations in the world have disappeared in a matter of 50 yrs. We should raise the bar & expect (zoos) better of zoos who should be concerned about animal welfare, invest in conservation & try to connect people with wildlife so that we can change that trend of animals disappearing.

When we had the disaster of the Poly Mine, there were many recommendations and promises of all that was going to change, but the auditor general last year was concerned about the underfunding for clean up of mines which has inched up to 1.273 <sup>Billion</sup> in 2015. BC law requires mining Co's to post a bond to cover costs of reclamation and any continuing treatment of tailings pond water when a mine closes.

In last year's report the auditor general said the shortfall of more than 1.2 Billion meant taxpayers could be on the hook if the mine couldn't pay for cleaning up a closed mine. She recommended that mine by mine details be reported (the mine minister) that gov't safeguard taxpayers by ensuring the estimate of reclamation is correct.

Last week for the first time mine x mine details were posted publicly in the province's chief inspector's of mine annual report and Minister Bennett says that will continue. That ~~with~~ he will continue to address some of the other concerns and will determine how to tighten up the requirement on security for mine clean up. He stated that the past process to determine how much money mines needed to post as security was somewhat ~~(a)~~ ad hoc, but now they are going to have to establish concrete, specific objectives and principles on how to actually assess the financial security they need and give full assurance for the taxpayer & a plan is meant to be ready by April. However Bennett says there's no way to say that the amount of underfunding would decrease as new mines are started, an

Example; mining giant Teck who has a long history in BC had a high underfunded reclamation liability accounting for 70% of provincial mining total - but says he has done now met reclamation bonding security. So we can imagine what's been going on. & really no assurances it will be better.

\* The BC govt will invest \$35M in parks over next 3 years partly to hire 25 more full-time park rangers. Some will also be used for programs to promote & protect the natural environment & provide an initial endowment for a new BC Parks foundation. \$25M will go directly to BC Parks operations and the remaining \$10M will go to the foundation to help generate private revenue. The govt has also said it's investing \$22.9M to build 1900 new campsites in parks and recreational sites.