From:	carol follett
To:	PDS Planning Commission
Subject:	Cherry Point UGA- Urban Growth Area Review/cherry Point UGA Proposal
Date:	Wednesday, September 02, 2015 10:51:27 AM
Attachments:	Energy Darwinism II Why a Low Carbon Future Doesnt Have to Cost the Earth.pdf

Re: Cherry Point UGA- Urban Growth Area Review/cherry Point UGA Proposal

Dear Members of the Whatcom County Planning Commission;

"Schizophrenia is a state characterized by the coexistence of contradictory or incompatible elements."

I am writing to share with you a study released on August 13, 2014 by one of "the world's largest financial institutions, operating in all major established and emerging markets," Citi, entitled "Energy Darwinism II: Why a Low Carbon Future Doesn't Have to Cost the Earth." These financial exerts came to some interesting conclusions in the "bean counting" debate of action vs. inaction on lowering carbon emissions that should inform future planning at Cherry Point. I further suggest that this study is larger in scope and ability than the local study made in 2014 by the vice president of Waycross Investment Management Company, Dr. Hart Hodges, which has been so heartily endorsed by the coal shipping hopefuls' cheering squad, Northwest Jobs Alliance.

## Economic Outlook for Fossil Fuels

"The sums of money at stake in terms of investment in the energy sector are staggering — we estimate at \$190.2 and \$192.0 trillion between 2015 and 2040 for Citi's 'Action' and 'Inaction' scenarios, respectively. The difference is marginal between the two scenarios; mainly due to the fact that although we spend more on renewable resources and energy efficiency in the 'Action' scenario, this is offset by savings in fossil fuels through lower usage and the lack of fuels used by wind and solar. However, going down the route of 'Inaction' would lead to a reduction in global GDP which could reach \$72 trillion by 2060 depending on temperature increase, scenario and discount rate used. We calculate the implied return of incremental avoided costs on annual spend and even though the returns are not spectacular, in today's context of low yields, and certainly in the context of potential implications of climate change inaction on society and global GDP, and with the additional benefit of cleaner air, the 'why would you not' argument comes to the fore, an argument that becomes progressively harder to ignore over time."

They discuss two current industries at Cherry Point, oil, and one proposed, i.e. shipping coal:

"Some studies suggest that globally a third of oil reserves, half of gas reserves and >80% of coal reserves would have to remain unused before 2050 for us to have a chance of staying below the 2oC limit. We examine the issue of unburnable carbon and stranded assets, in particular in which countries, industries and companies they

are located, and find that at current prices, around \$100 trillion of assets could be 'carbon stranded', if not already economically so. The clear loser stands to be the coal industry, though we examine the economics and potential offered by carbon capture and storage....

.... A low carbon route essentially involves investing more heavily in low emissions technologies such as renewables, investing less in fossil fuels, in particular coal in power and oil in transport, and investing significantly more in energy efficiency to reduce overall energy usage..."

In the model of economic prediction the authors state:

"It can be argued that a purely capex-based approach does incorporate fuel costs, in that they are effectively captured in the upstream investment into coal mines, oil and gas fields etc., the fuel 'costs' essentially providing a return on the capital investment. However, once again this assumes that load factors, fuel costs and selling prices will be adequate, and hence once again assumes in many ways just as many assumptions as an LCOE approach does."

I hope you will read this study in full and think about it as you plan. Why would you encourage development that will create irretrievable ecological damage for a short term financial gain in what is rapidly becoming a literally dead end industry?

I would appreciate a response to this note.

Thank you for your time,

Carol Follett