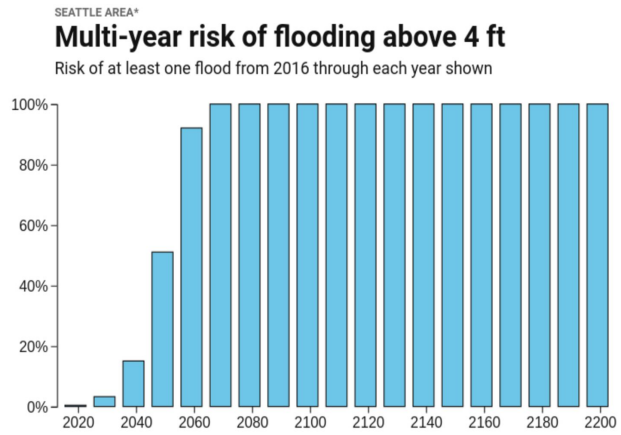
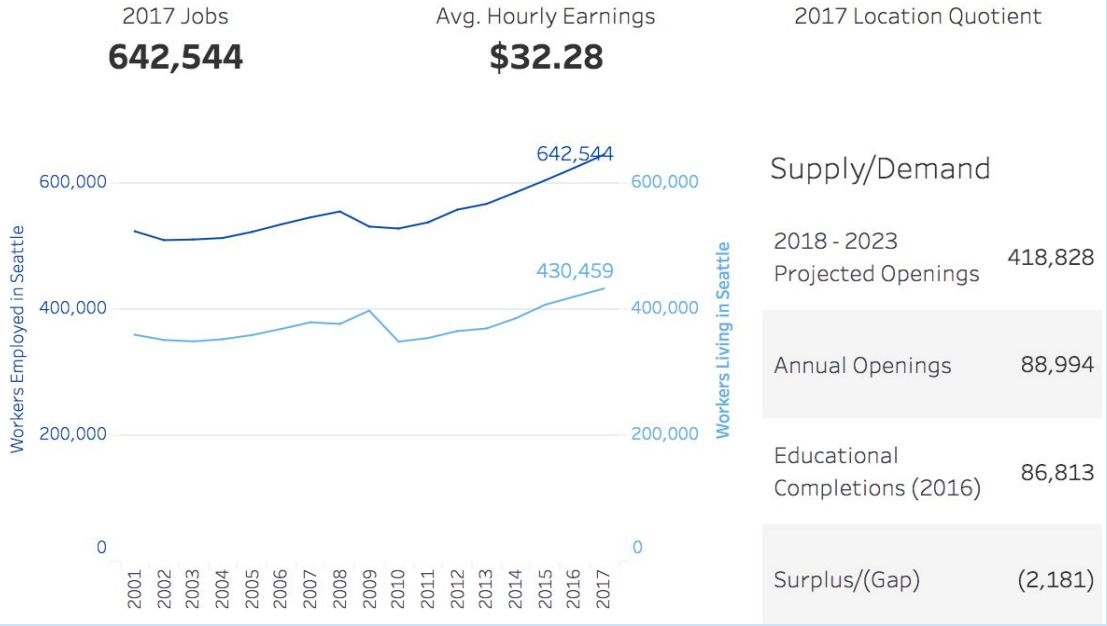
Protect Seattle Businesses

Issue → Rising Sea Level

Puget Sound shoreline has risen ~6” (inches) in past century and is projected to rise ~7” by 2050



https://riskfinder.climatecentral.org/place/seattle.wa.us?comparisonType=place&forecastType=NOAA2017_int_p50&level=4&unit=ft



http://www.seattle.gov/office-of-economic-development/workforce-development/data-and-resources

Seattle: Fasting Growing US City

— Agriculture & Food Manufacturing is 2nd largest industry in the state, and this sector would be heavily affected by policies on climate change.

— Sales tax already high at 10.1%, and any other additional cost would increase Cost of Living

Job statistics provided to the left.

https://www.visitseattle.org/press/press-kit/seattle-facts

How to Adapt to Sea Level Rise While Considering Impact on Business Sector?

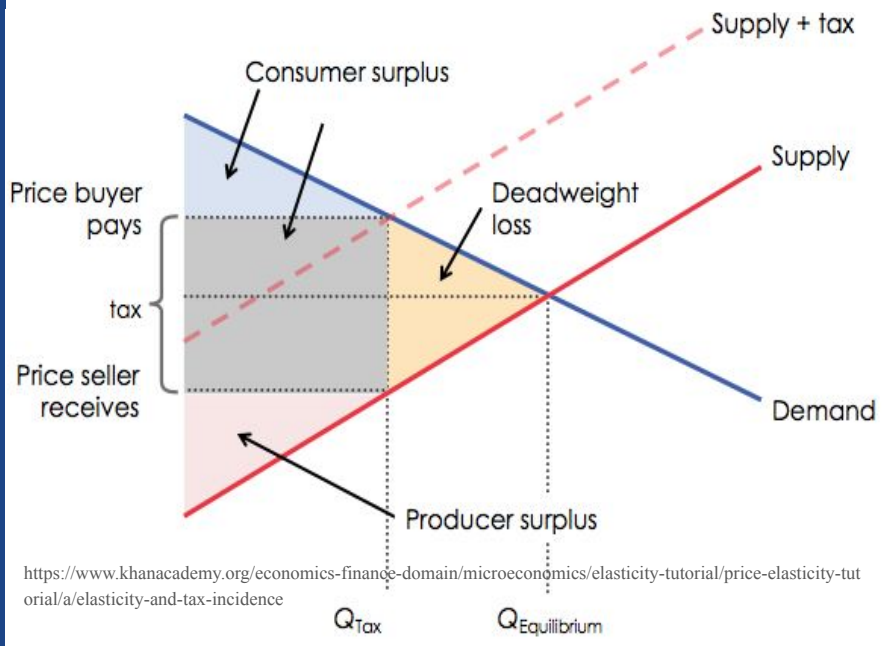
Solution → Cost-Benefit Analysis

In order to protect Seattle businesses by minimizing the cost of adaptation and mitigation associated with strict preventative measures, we propose for adapting to climate change and the risks involved as they come. This will not burden business with transaction costs, and helps consumers by keeping prices stable.

Minimizing Cost

Forcing the population to shift to a different, less efficient energy source can prevent mutually beneficial trades from occurring, leading to inefficient outcomes. If the loss of economic welfare from banning a product from the market is greater than the gain in terms of the reduced external cost associated with the product, then banning it would result in a net welfare loss.

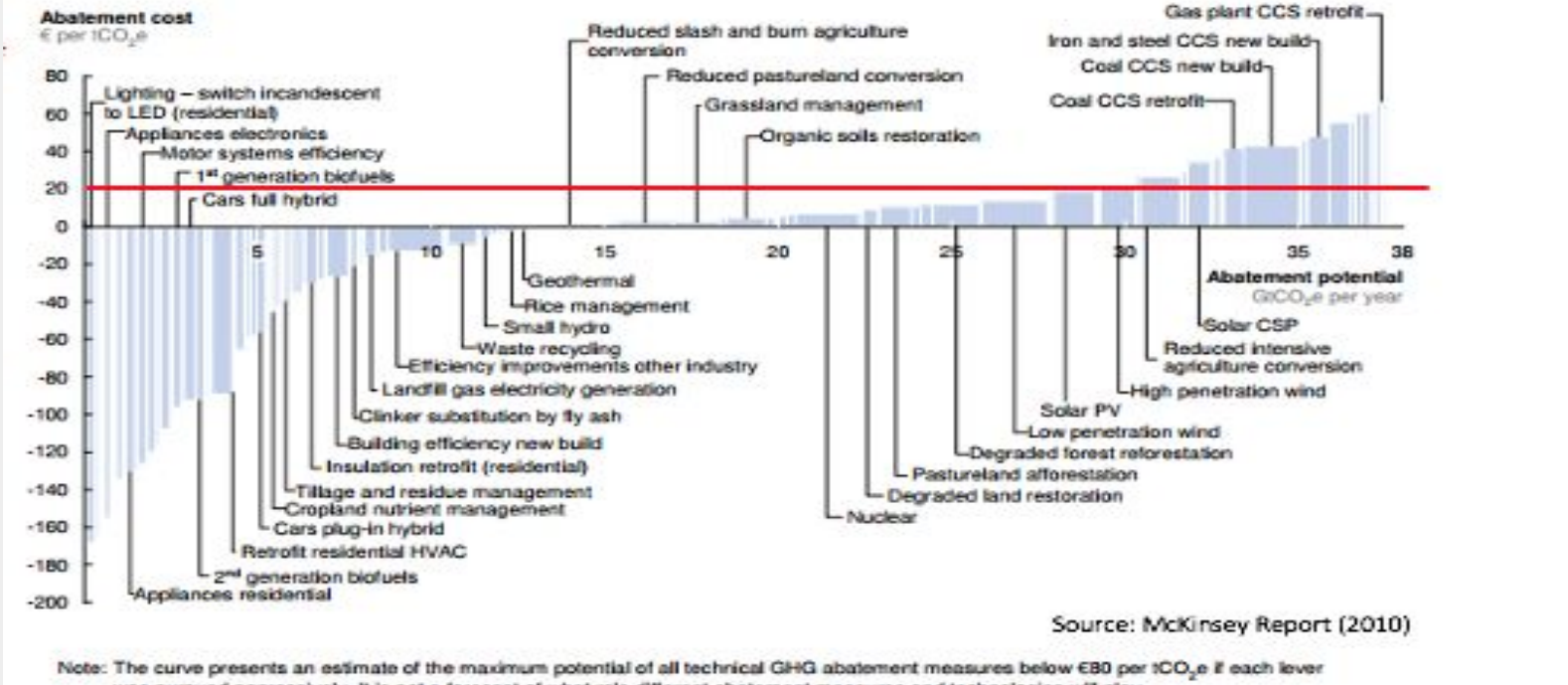
The effect of transactional costs on business



https://www.khanacademy.org/economics-finance-domain/microeconomics/elasticity-tutorial/price-elasticity-tutorial/a/elasticity-and-tax-incidence

In order to minimize costs and protect business, we therefore propose the adaptation strategies that have a negative abatement cost (the strategies on the left side of the diagram below) and do not shift the burden to the producers but can instead be implemented by households. These policies that protect business are listed below.

***switching lighting to LED *increasing popularity of hybrid cars *retrofitting residential HVAC & installation *recycling waste**



Source: McKinsey Report (2010)

Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €80 per tCO_2e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.