

Introduce conversation on CI gas to KPB Assembly

Affordable natural gas from the Cook Inlet Basin has powered and heated much of the Railbelt from the early 1960's. It was present in significant supply to feed the Agrium plant in Nikiski and export for many years. However, by 2004, easy supply had decreased and prices began to climb. The Agrium plant shut down in 2007, and the export facility stopped exporting in 2015. The Federal Energy Regulatory Commission (FERC) approved a plan in 2020 to convert the export facility to an import facility, but with a capacity that would only be a tiny percentage of Cook Inlet's needs .

In 2010, the Alaska Legislature passed the Cook Inlet Recovery Act, providing significant (~\$2+B) subsidies for further exploration in Cook Inlet. \$2.25 - \$2.5 billion will be paid by the state when all obligations come due.

While this effort provided an additional 12 or so years of solid supply, we are again at the point where shortages are present on the horizon. HilCorp made a statement in April 2022 to the five Railbelt electrical utilities that they would not be able to fully commit to extending long term gas contracts as they begin to expire in the spring of 2024. In May, Luke Saugier, Senior VP for Alaska, announced at Governor Dunlevy's Sustainable Energy Conference that HilCorp did not anticipate that their exploration activities would lead to discoveries that could fill future demand, and that Cook Inlet Gas supplies would not be sufficient to meet demand in three to five years. He said Hillcorp was available to assist renewable energy companies with data and development of tidal or geothermal energy, potentially leasing drilling platforms for tidal energy or assisting in understanding tidal dynamics in Cook Inlet.

The Alaska Oil and Gas Commission published a report in 2018 stating that while it is expected that up to 1.3 trillion cubic feet of gas are still under Cook Inlet, the cost for extraction would be 50 to 100% higher than existing costs, and

Oil and gas production started in the Cook Inlet basin after the discovery of the Swanson River field in 1958. Figure 6 shows natural gas production began ramping up in late 1960s as new industrial end users were coming online. Production expanded through the 1970s and ranged around 200 Bcf per year until the mid-2000s, when it began to decline sharply. As of June 30, 2017, the Cook Inlet basin produced approximately 8.505 trillion cubic feet of gas and 1.365 billion barrels of oil.

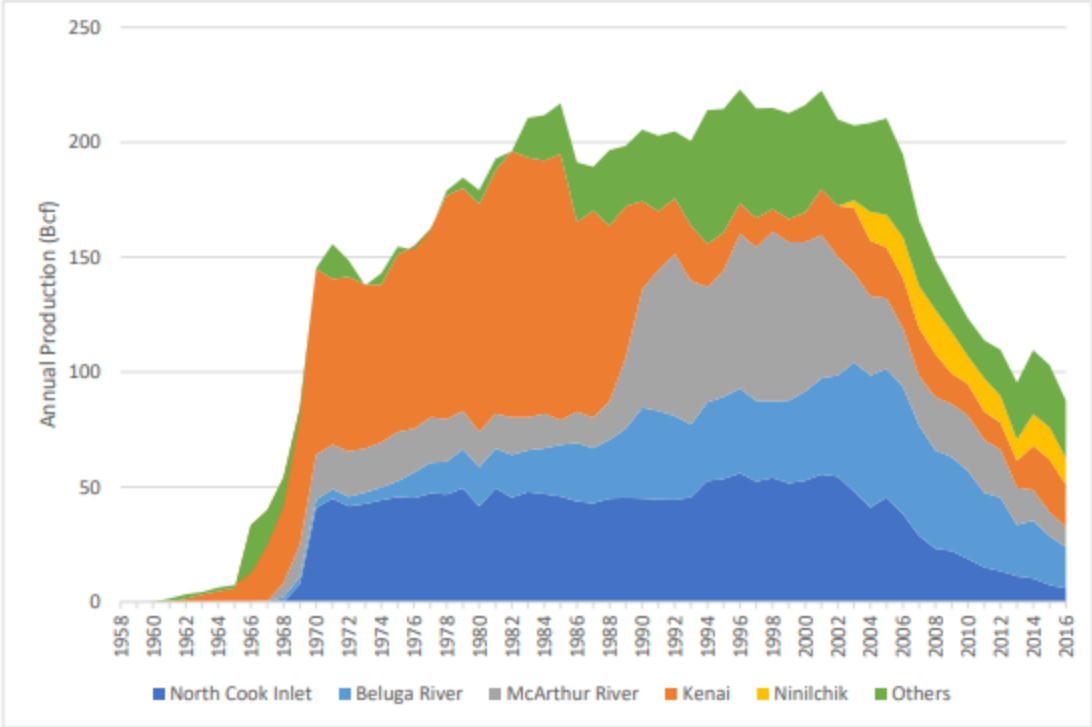
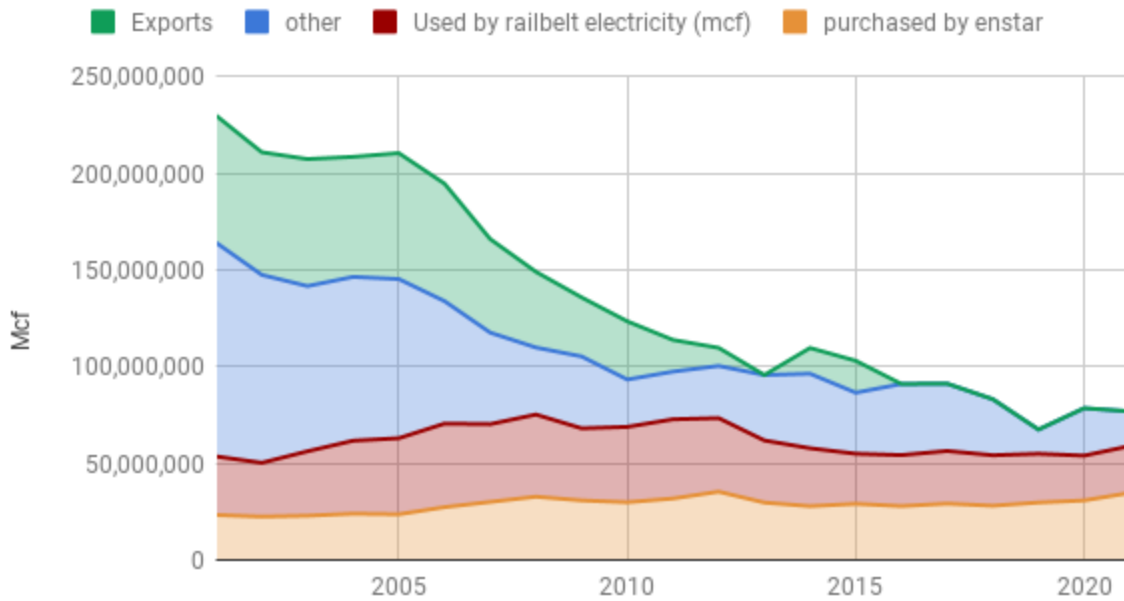


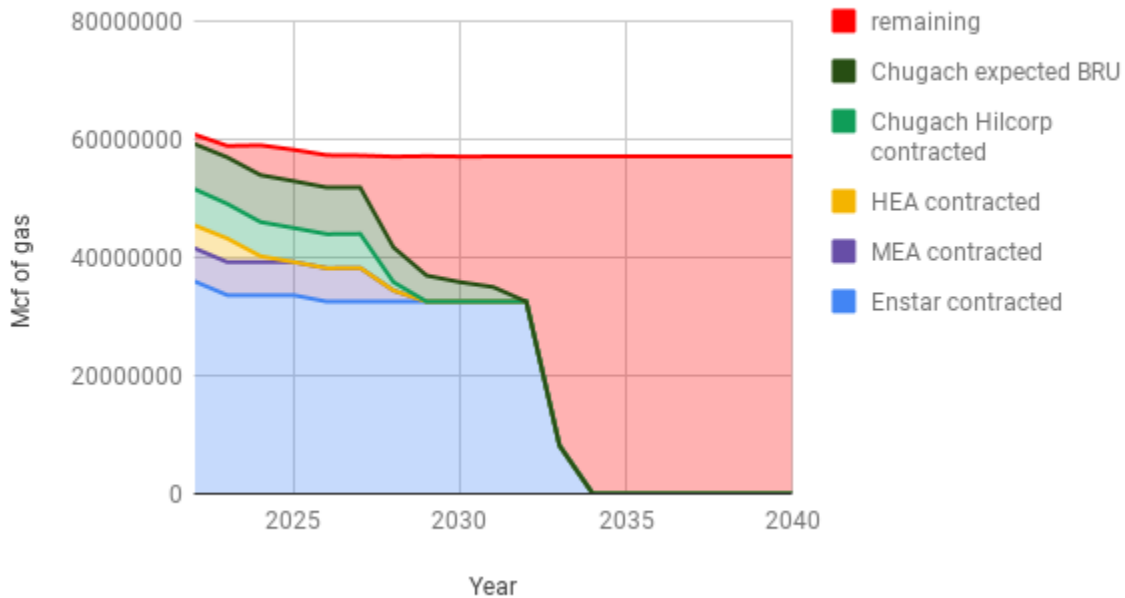
Figure 6. Historical Cook Inlet natural gas production

Note: Data sourced from AOGCC. Production excludes reinjections for enhanced oil recovery at the Swanson River field and storage injections and withdrawals.

Cook Inlet Gas usage



Gas contracts vs expected utility gas needs



As we head into the next stage of energy uncertainty in the Cook Inlet Region, more of the same is just a band aid on the long term problem. At a minimum, a diversification from all energy sources being Cook Inlet gas to a broader mix is in order. Best case scenario is the development of of long-term, stable

sources of renewable and affordable energy to power and heat homes and businesses in the Kenai Peninsula Borough.

Solar and battery storage can be produced now for the avoided costs of gas not burned. Wind energy with battery storage is currently the cheapest source of new energy projects in the United States, and even if the cost is tripled for Alaska, it is still near the avoided cost of not burning gas. Expansion plans for battery storage are underway at Chugach Electric and Golden Valley Electric Association, and the Homer Electric Association already has a substantial battery in place and operational. Ocean Renewable Power Corp has a turbine in Cook Inlet at point Mackenzie this summer, currently set in a static mode see how Beluga whales will react. It will go live later and company projections are to deploy 2MW turbines by 2025 and 5MW turbines by 2027.

The Governor and the Alaska Energy Authority (AEA) announced in spring 2022 the application for a FERC permit for the Dixon Diversion project above Bradley Lake.

Oil and gas federal leases in the Cook Inlet have drawn minimal interest in recent years. Another is planned for 2022. The State of Alaska is not in a position to bail out the industry in exploration as they did in 2007.

And finally, electric transportation is increasing and once it hits about 10% of vehicles, will increase exponentially as costs come down. Current prices are \$.60-\$1.00 per vehicle mile, electric vehicles may be as low as \$.10 per mile by 2025 or 2026. This increases demand on the electric grid, and necessitates different thinking about power production.

The economic impacts of rising gas prices will be felt throughout the peninsula. Homes and businesses will cost more to operate. Borough buildings will cost more to operate, exacerbating energy impacts on borough finances

With all this, the RSAC asks the KPB assembly to consider the following:

1. Study the problem - the crisis in natural gas supply affects the entirety of our energy infrastructure, and is quite complex
 - a. Convene working group and engage borough staff time to identify and refine ideas like those outlined below.
 - b. Establish a dialogue with Hilcorp to learn what we can from their assessment of the situation.
 - c. Economic impact analysis
2. Conservation - by reducing consumption of natural gas, we reduce dependency and increase the time available to adopt alternative sources
 - a. Borough facilities: Assess natural gas consumption and electricity consumption, identify potential efficiency improvements, implement them.
 - b. Other facilities: The Borough may be able to encourage more widespread efficiency improvements
 - i. Public education: Use Borough outreach staff and explicit action like resolutions to encourage businesses and individuals to reduce natural gas consumption.

- ii. Policy: Develop tax or building code policy that incentivises alternatives to natural gas
 - c. Pass C-PACE ordinances to help businesses secure capital for efficiency improvements
- 3. Develop alternatives - the Borough can seek to encourage development of alternatives to fill the gap left by dwindling gas supplies
 - a. Landfill gas: Accelerate the Borough landfill gas energy project.
 - b. Encourage development on Borough property: The extensive land holdings under Borough management may in some cases be advantageous for energy development (e.g. solar farms.) Identify these sites, establish appropriate designations, and seek partners for development.
 - c. Tax policy: Look for other opportunities to encourage energy development along the lines of the IPP tax break ordinance.
 - d. Develop solar on borough facilities as net-meter or SFPPR customers for HEA / Seward Utility. For example - rooftop solar on Borough school buildings.
- 4. Leadership - the Borough can help coordinate action at different governmental levels and among the public:
 - a. Resolution encouraging city governments to adopt policies reducing gas consumption or increasing renewable consumption. Pair encouragement with offer of staff resources (e.g. grant writing.)
 - b. Emphasize the urgency of the situation to the state government - KPB is heavily dependent on HEA, which is the first utility to lose its active contract in 2024. Encourage productive engagement by the state, e.g. through fiscal incentives to develop utility-scale alternative energy.
 - c. Similarly reach out to the federal government. Work through Murkowski's office to identify specific opportunities to bring federal funding to bear on our situation.
 - d. Convene a public conference on the topic with a title like "The State and Future of Cook Inlet Gas and Energy"