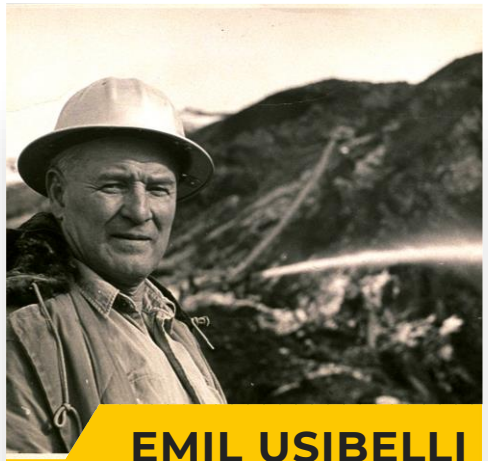
Providing Affordable & Reliable Energy Today and in the Future

UCM USIBELLI COAL MINE

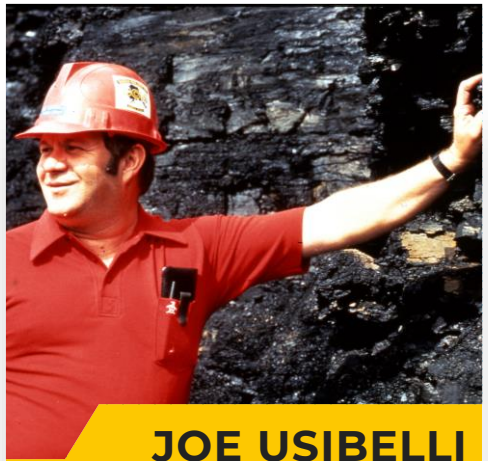
UCM USIBELLI COAL MINE

CELEBRATING 81 YEARS OF USIBELLI FAMILY LEADERSHIP



EMIL USIBELLI

1943, at age 50, Emil founded the coal mine.



JOE USIBELLI

1964 - 1987, he served as president. From 1987 until his death in 2022, served as chairman of the board.

JOE USIBELLI JR.

Since 1987, Joe Jr. has led the coal mine.

A DEDICATED TEAM OF EMPLOYEES

~100 full-time/yearound employees

33% 2nd, 3rd, & 4th generation coal miners

100%
all-Alaskan Workforce

SAFETY AT OUR CORE:

DEDICATED TO MAINTAINING SAFETY AT WORK, AT HOME, AND AT PLAY.

TOP 3
Safety Milestones

1st	1,214 DAYS	2024
2nd	1,085 DAYS	2020
3rd	797 DAYS	2006

EVERYDAY SAFETY
AT WORK • AT HOME • AT PLAY

CORESAFETY Certified

Proud to be CORESafety Certified by the National Mining Association since 2019

USIBELLI COAL MINE TODAY...

~ 1 million

tons of ultra-low sulfur coal is produced each year

~ 80 million

tons of proven reserves under current mining permits

More than
400 million

tons of proven coal reserves in the area

100%

of Alaska's coal demand is supplied to 6 coal-fired power plants in Interior Alaska

INTERIOR ALASKA'S EXISTING ENERGY INFRASTRUCTURE & SUPPLY

165 megawatts of total capacity

Eielson Air Force Base

25 MEGAWATTS

University of Alaska Fairbanks

17 MEGAWATTS

Fort Wainwright Army Post

20 MEGAWATTS

Golden Valley Electric Association

25 MEGAWATTS & 50 MEGAWATTS

Aurora Energy

28 MEGAWATTS

IMAGE CREDIT: Alaska Miners Association

POWERING ALASKA'S MINING INDUSTRY

40% of Alaska's mines and exploration projects get electricity from Golden Valley Electric Association, including **3 of 7** producing Alaskan mines

A **critical requirement** to move from advanced exploration project to a producing mine is access to **affordable and reliable electricity**

COAL IS A CRITICAL SOURCE OF INTERIOR ALASKA HEAT AND POWER.

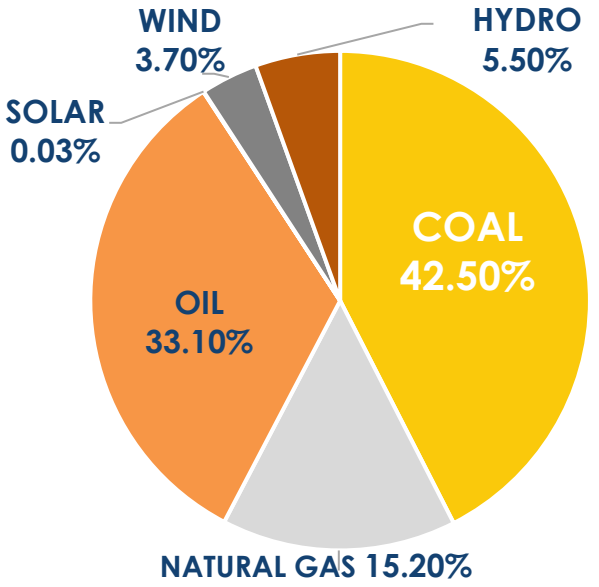
42.5%
of Golden Valley Electric Association's electricity generation comes from coal

Fuels for Electricity Generation

Just over **90%** of electricity sold by GVEA comes from **coal**, **diesel**, **naphtha**, and **natural gas;** less than **10%** comes from **hydroelectric**, **wind**, and **solar**

Summary of Utility-Scale Interior Electricity Generation Infrastructure, 2020

Fuel	Number of Plants	Capacity (MW)	Percent of Total Capacity	Percent of Total Generation
Diesel	4	196	37%	12%
Coal	6	177	33%	50%
Intertie	-	70	13%	9%
Naphtha	1	60	11%	26%
Wind	1	25	5%	3%
Solar	1	0.5	<1%	<1%
Total	**13**	**529**	**100%**	**100%**

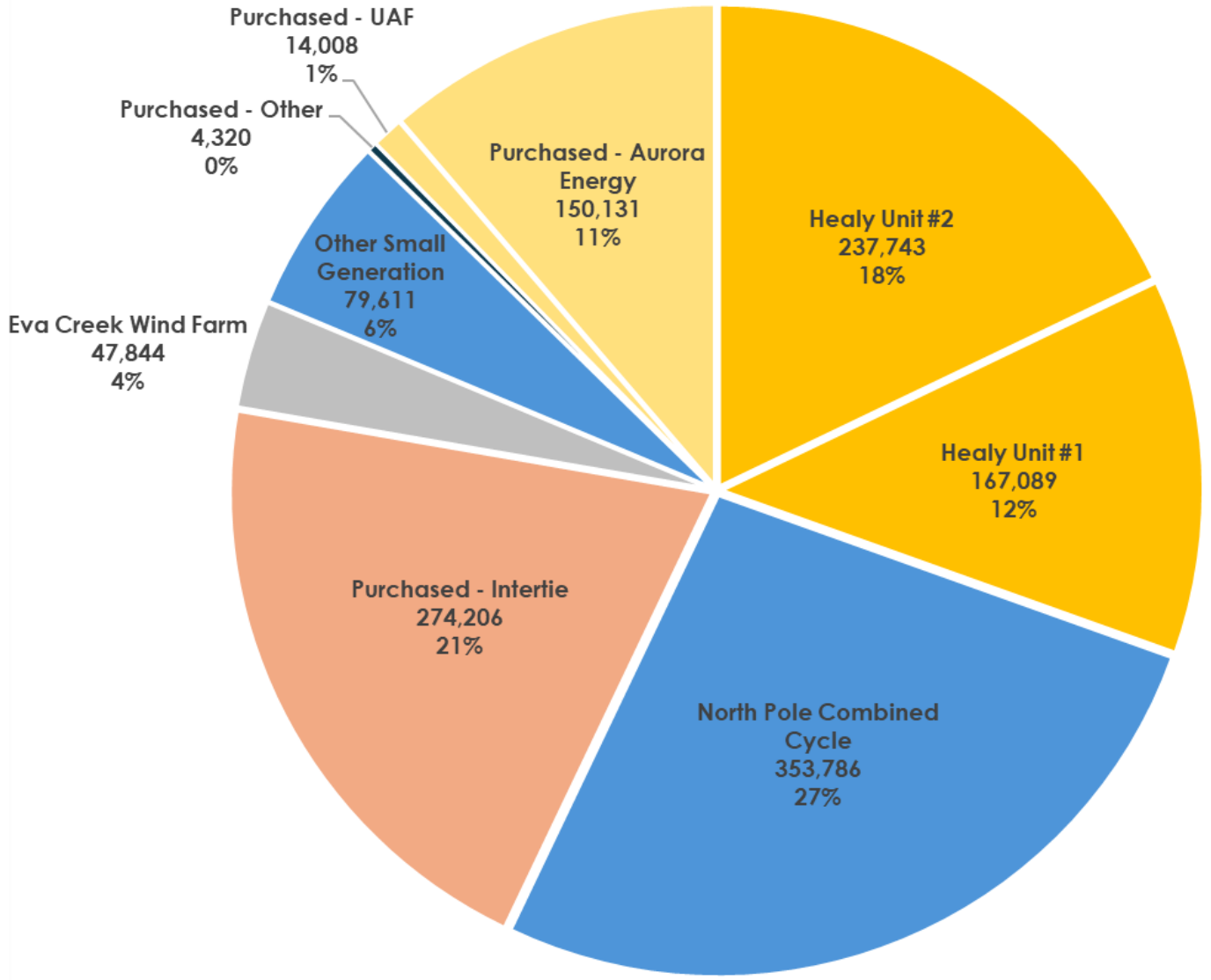


2022 GVEA FUEL DIVERSITY

2022 ELECTRICITY SUPPLIED BY GVEA (MWh); 1.3MWh Total

Not reflected is electricity produced by Fort Wainwright, Eielson Air Force Base, and UAF for their own use

Those plants are meeting as much as ~400K MWh (30%) of additional “hidden” demand

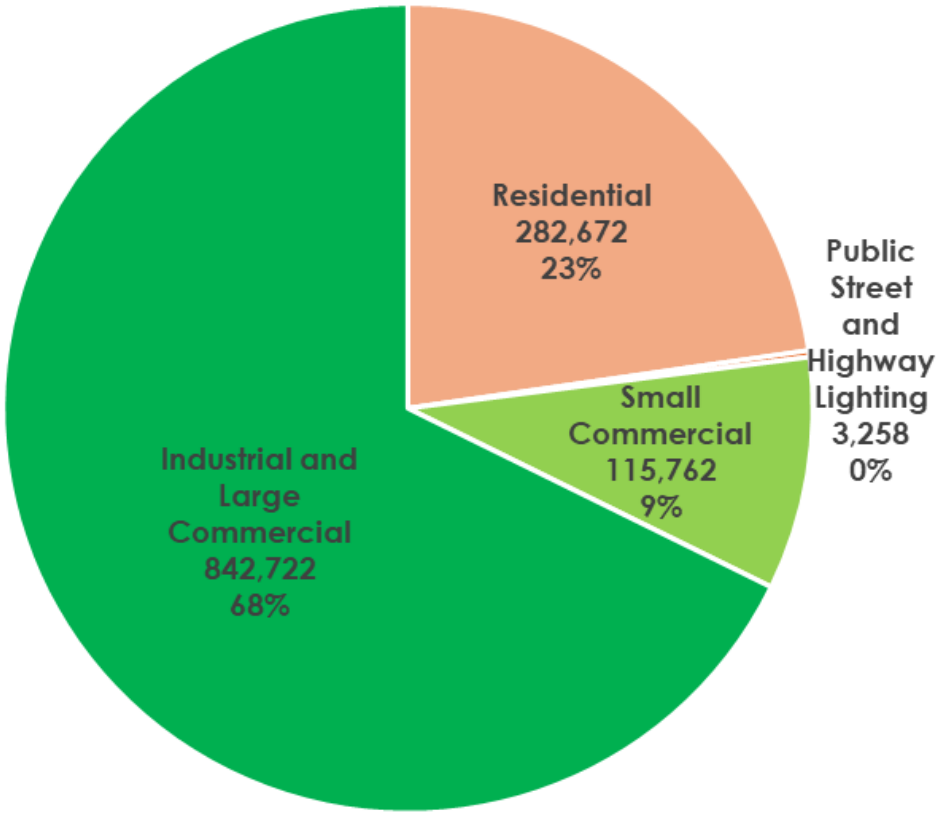


DATA SOURCE: GVEA 2022 RCA Report

2022 ELECTRICITY SOLD BY GVEA (MWh); 1.2MWh Total

70% of all electricity sold by GVEA powers **industrial and commercial customers**

These applications have significantly **higher peak demand** requirements and need reliable, **baseload power**

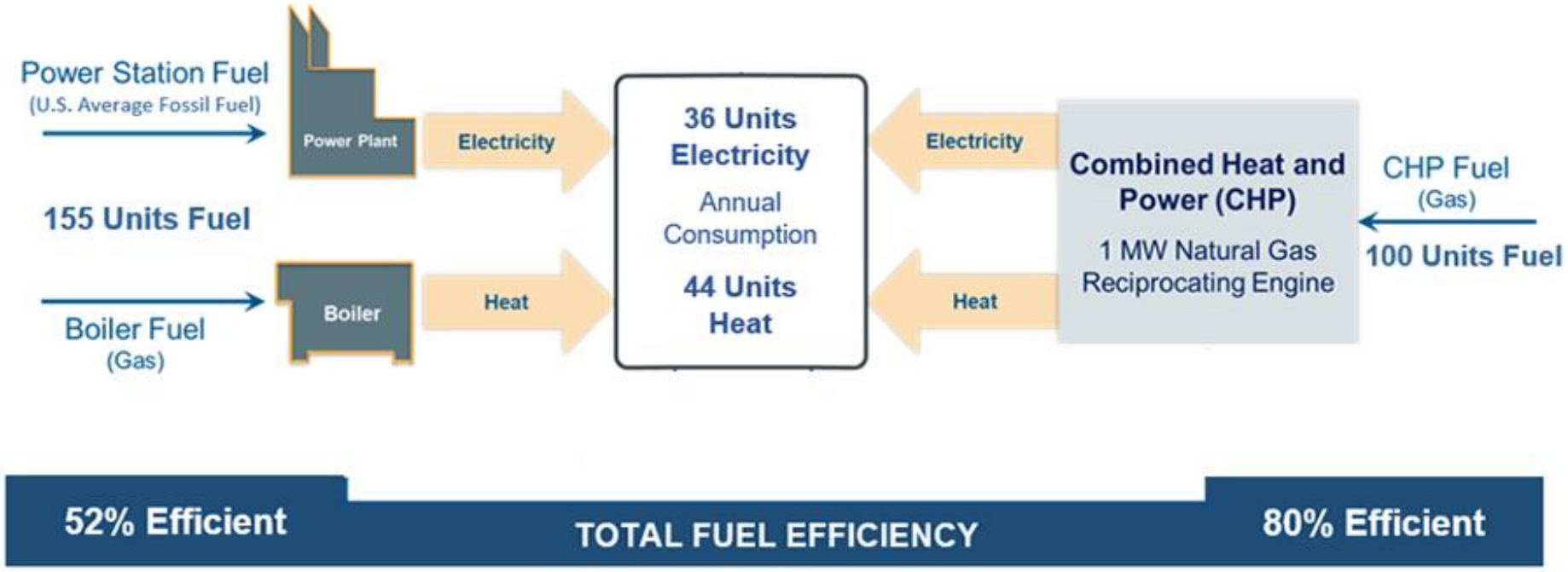


DATA SOURCE: GVEA 2022 RCA Report

TALKING 'BOUT MY (CO-) GENERATION

CONVENTIONAL GENERATION

COMBINED HEAT & POWER (CHP)



Fairbanks coal plants are all COMBINED HEAT & POWER (CHP) PLANTS

CHP's in Interior Alaska lowers fuel consumption and total energy costs by ~30%

CHP's also lowers emissions associated with energy generation by ~30%

INNOVATING ENERGY FOR THE FUTURE

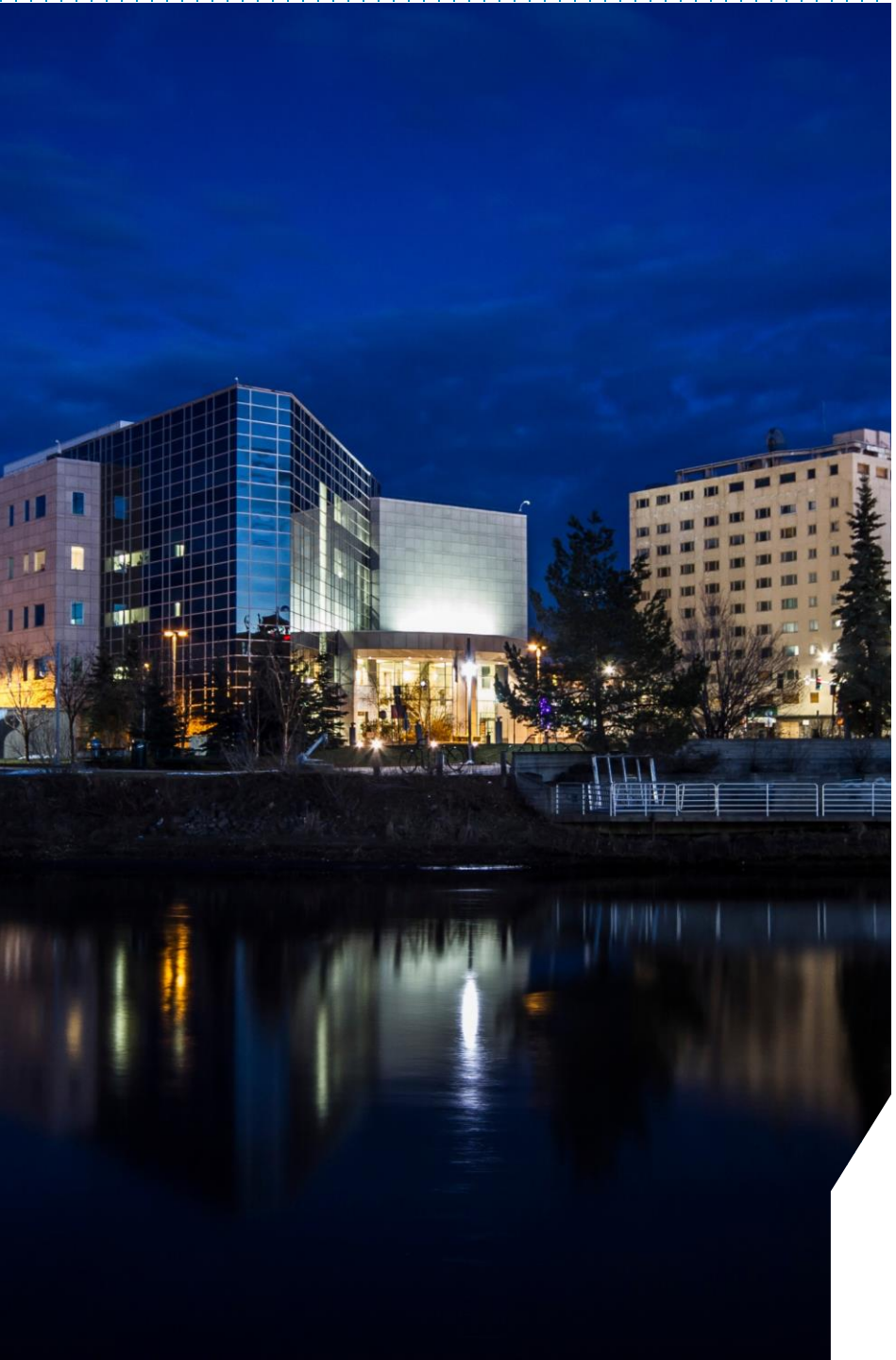
Energy demand will continue to increase, requiring new capacity:

- **Total** Capacity
- **Peak Demand** Capacity
- **Transmission** Capacity

Energy demand must be met in an **environmentally and socially responsible** manner

Carbon capture, utilization, and storage (CCUS) is one of the few emergent technologies that targets **baseload requirements and emissions reductions**

Renewable energy sources **cannot meet baseload and peak demand** requirements for existing and future mining and industrial facilities

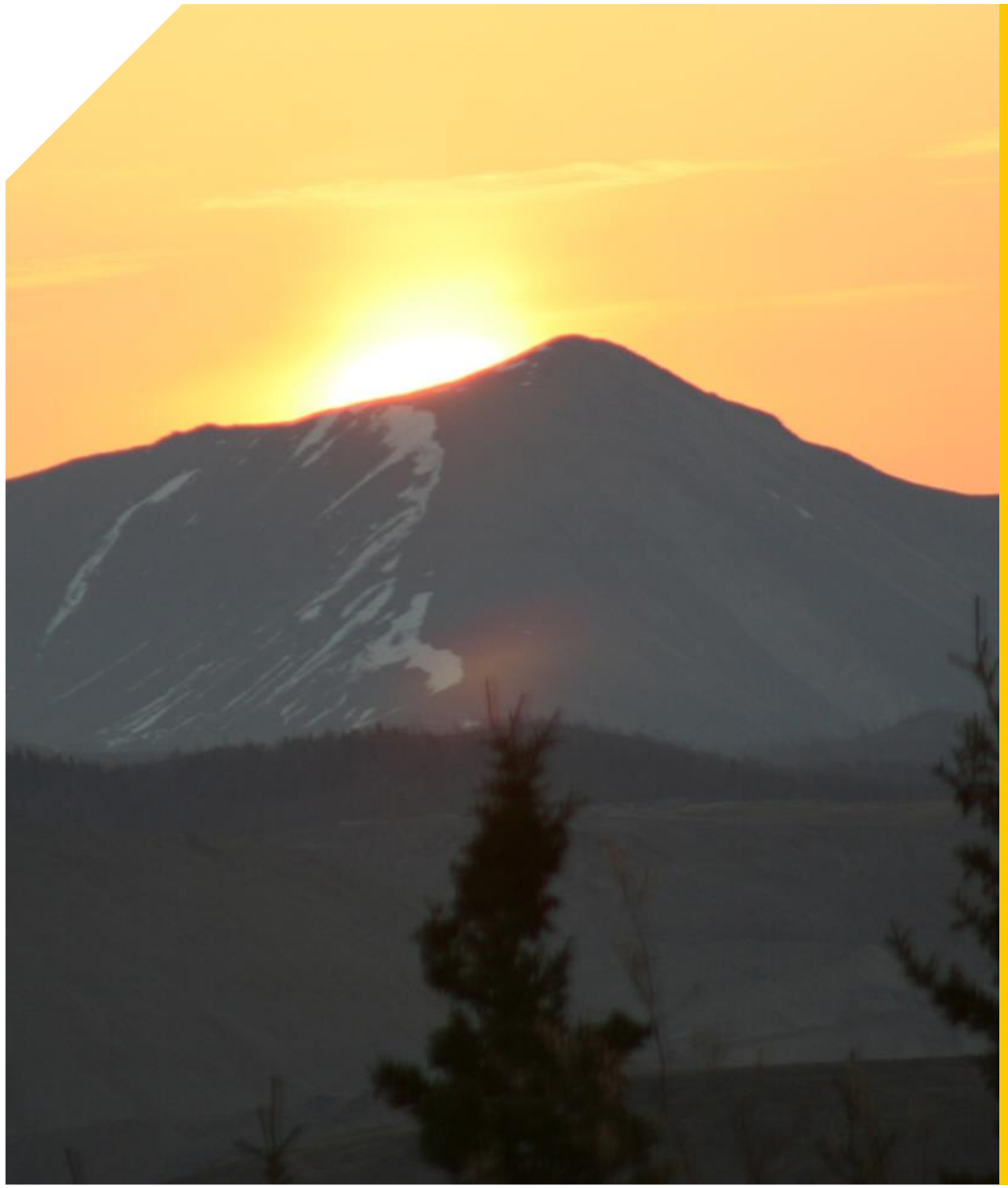


POWERING ALASKA TODAY

Alaska ranks **46th and 48th** nationwide for residential & commercial **electricity costs**
(Source: chooseenergy.com; US EIA)

Alaska's mines, businesses, homes, and military installations must have access to **affordable and reliable** electricity

Existing **coal** infrastructure is proven **and holding energy cost increases at bay**



POWER ALASKA'S TOMORROW

Growing Alaska = Growing Alaska's resource industries.

Coal enables Alaska's economy with secure, reliable, and affordable energy.

Alaska is fortunate to have centuries' supply of clean-burning, ultra-low sulfur coal.

Innovative technologies (CHP & CCUS) will ensure coal remains a viable energy source for Alaska long into the future.

AN INTERIOR ALASKA WITHOUT COAL

COAL IS NECESSARY.

ALASKA'S ENERGY FUTURE REQUIRES AN ALL-OF-THE-ABOVE APPROACH.

CLEAN COAL

OIL AND GAS

RENEWABLE ENERGY

INCREASE

of **$242 million** in energy costs for power producers AND ratepayers

LOSS

of **464 high-paying jobs** and **$42.8 million in wages** (up/downstream)

LESS

$28.4 million dollars spent throughout Alaska's economy statewide

LOSS

of **annual financial support** to UAF and the non-profit community