



Proposed Power Sales Contract

Alcoa's Perspective



Agenda

- Introductions
 - Alcoa, Wenatchee Works, Our Business
- Why is the Proposed Contract Good For Alcoa?
- Why is the Proposed Contract Good for the Community?
- Why is the Proposed Contract Good for the PUD Customer/Owners?



Alcoa at a glance

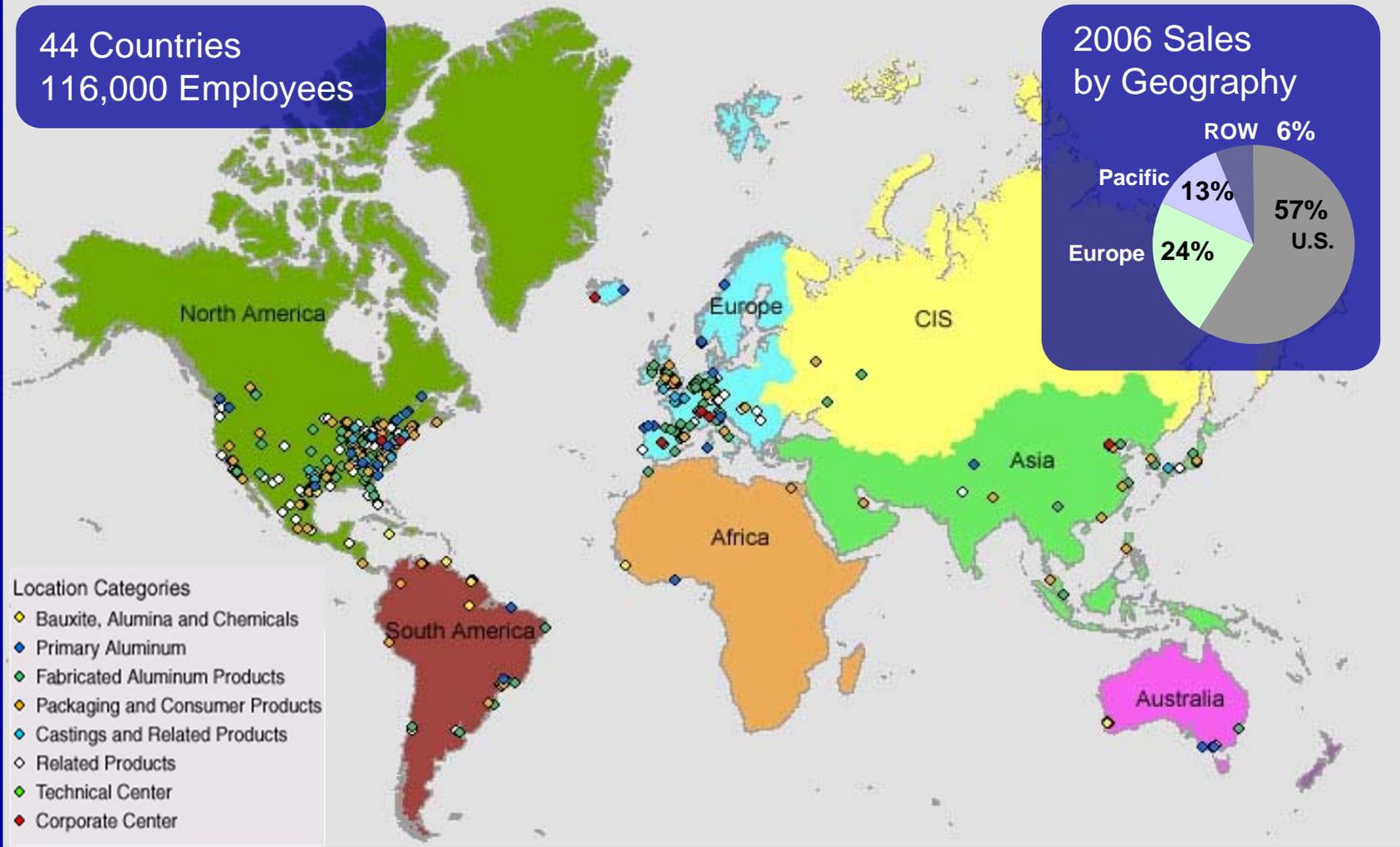
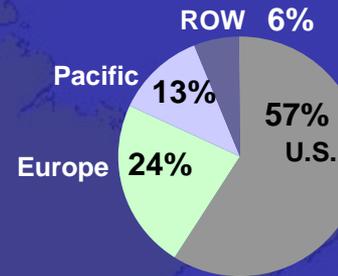
- Leading aluminum products company
 - Primary aluminum and alumina
 - Flat-rolled aluminum and hard-alloy extrusions
- Active in all major segments of the industry:
 - Technology – Smelting
 - Mining – Fabricating
 - Refining – Recycling

Products serving the aerospace, automotive, commercial transportation, packaging, building and construction, and industrial markets.



44 Countries
116,000 Employees

2006 Sales
by Geography



Location Categories

- ◆ Bauxite, Alumina and Chemicals
- ◆ Primary Aluminum
- ◆ Fabricated Aluminum Products
- ◆ Packaging and Consumer Products
- ◆ Castings and Related Products
- ◆ Related Products
- ◆ Technical Center
- ◆ Corporate Center



North America:

Smelting 2.8M tonnes
Refining 2.3M tonnes

Europe:

Smelting 0.6M tonnes
Refining 1.3M tonnes

Iceland

Smelting 0.3M tonnes

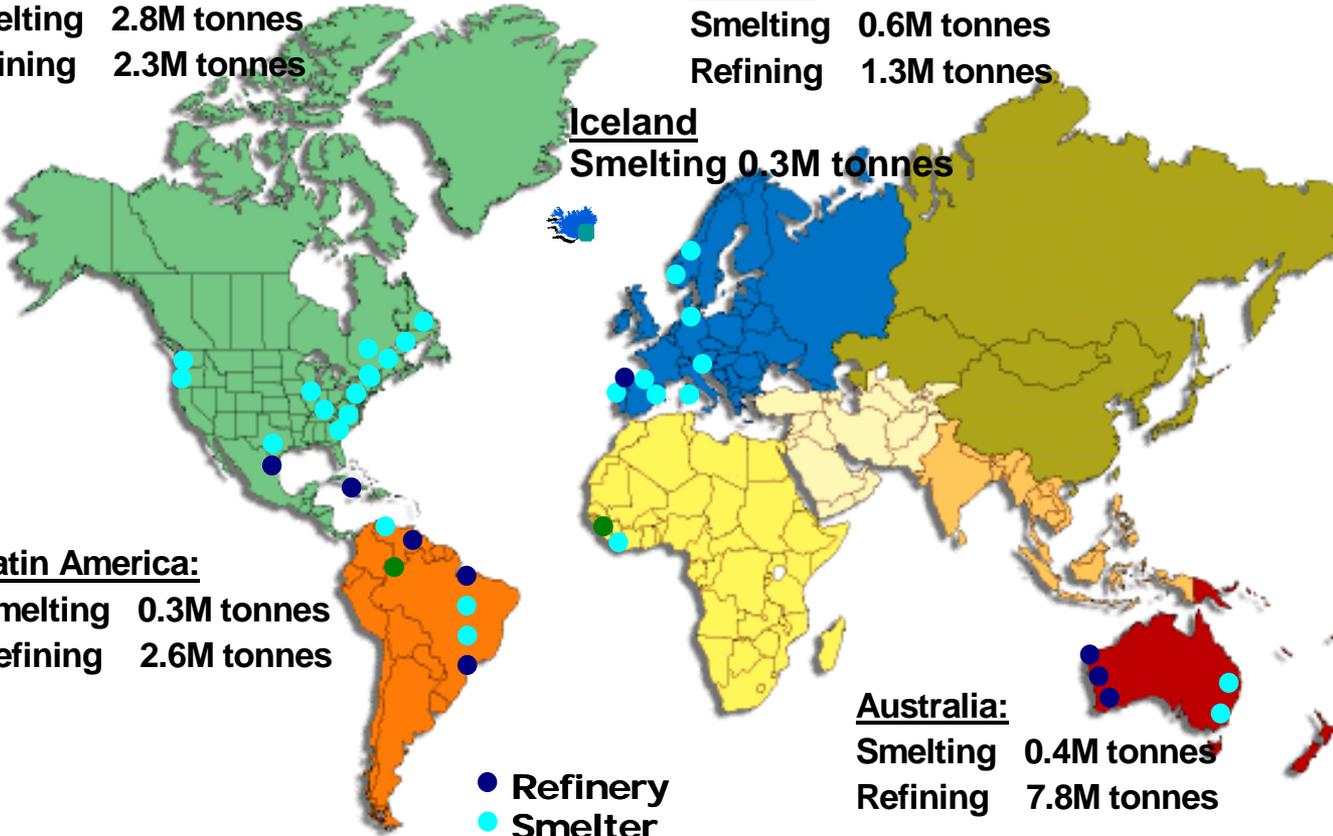
Latin America:

Smelting 0.3M tonnes
Refining 2.6M tonnes

Australia:

Smelting 0.4M tonnes
Refining 7.8M tonnes

- Refinery
- Smelter
- Stand-alone bauxite mine



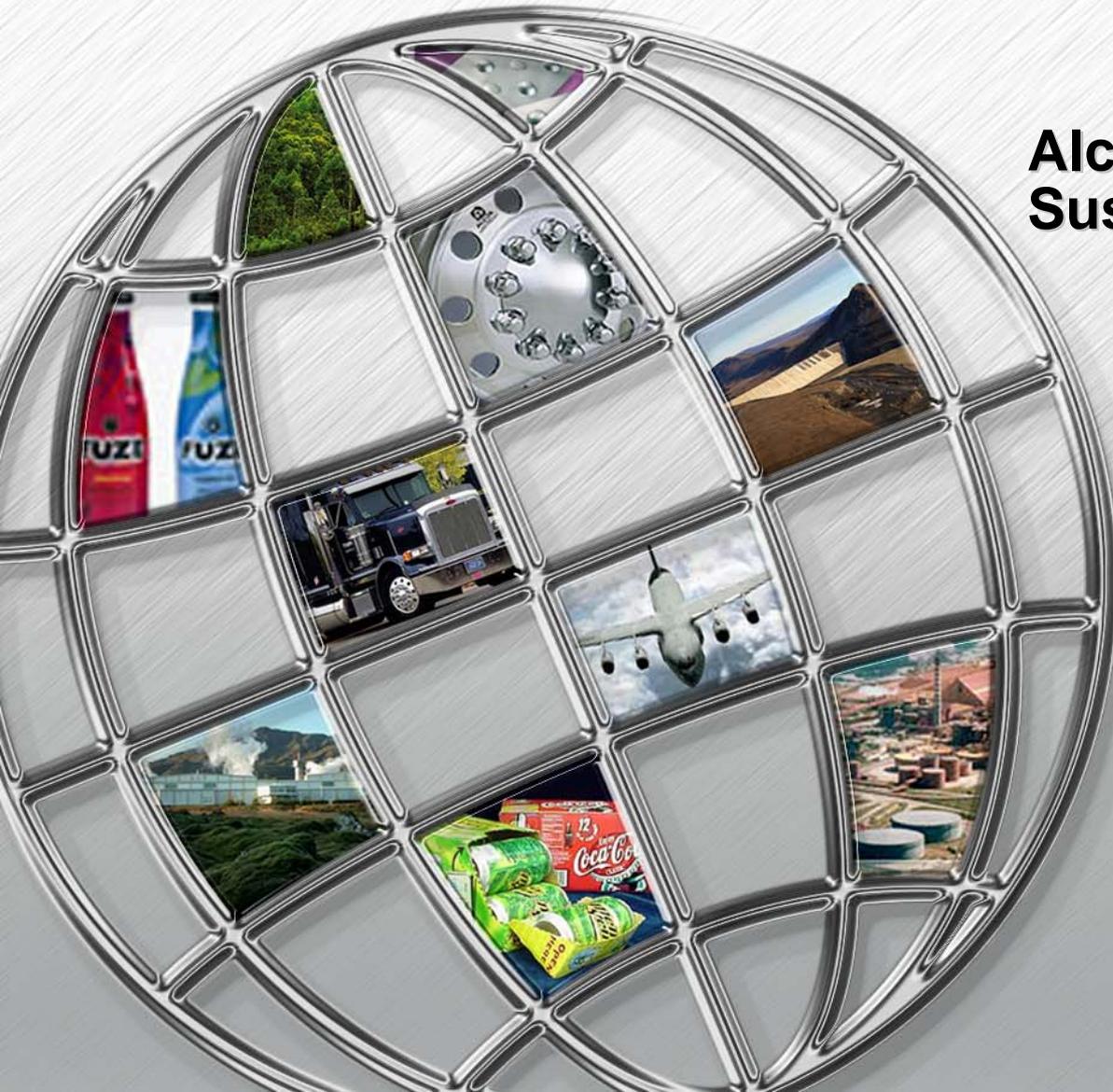
Key Facts (2006)

- 25 Smelters on 5 continents
- 9 refineries on 4 continents
- 3.6 mmt Aluminum Production -- 11% of world output
- 15.1 mmt Alumina production – 23% of world output
- \$8.9 billion in 3rd Party Revenue
- \$15 billion total Revenue incl intercompany sales to down-streams

- Integrity
- Environment, Health and Safety
- Customer
- Excellence
- People
- Profitability
- Accountability



Alcoa's Values and Sustainability





- Member Dow Jones Sustainability Indexes
- Most Sustainable Corporation / World Economic Forum in Davos
- Top Green Company by BusinessWeek magazine and the Climate Group for GHG reductions
- \$8.6 million Conservation & Sustainability Research Fellows Program
- Named by CERES as a leader in climate change and governance
- UNEP Global 500 Role of Honour
- World Environment Center Gold Medal





- A Megatrend and a global issue
 - The global dialogue has moved from debate to action
 - Global consumption growth is raising the stakes
 - Aluminum has tremendous value in addressing the challenge
 - Aluminum is part of the solution to climate change



Aluminum: part of the climate change solution



- Recyclability
- Lasting value
- Automotive lightweighting
- Aerospace value
- Greenhouse gas neutral

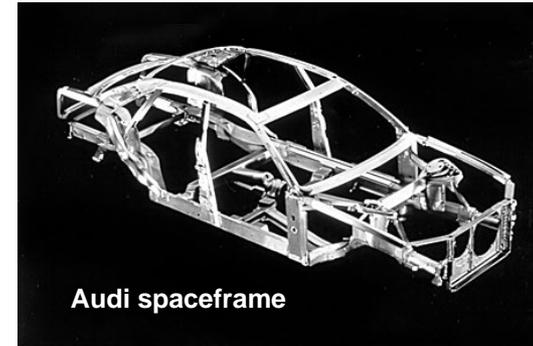
Part of the solution: Recycling

- One of the most recyclable, reusable materials on earth
- 73% of all aluminum ever produced is still in use today
 - Since 1888, about 800 million tonnes of aluminum have been produced.
 - About 580 million tonnes of this amount is still in productive use.
- Recycling the metal currently stored in use would equal 15 years' primary aluminum output.
 - Saves 95% of mine-to-ingot energy of primary production
 - Saves 95% of mine-to-ingot GHG emissions



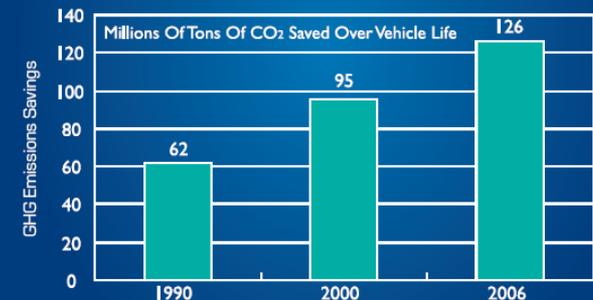
Part of the solution: Automotive lightweighting

- Aluminum is the most sustainable automotive material in the world
- 95% of the aluminum from a scrapped vehicle is recycled at the end of the vehicle's useful life
- The amount of aluminum used in automobiles has doubled over the last decade
- Aluminum use in transportation saves 250 million tons of CO₂ emissions per year
- Using aluminum to replace steel saves 22.9 kg of CO₂ per kg of aluminum
- Aluminum adds performance, safety and style without adding weight



Vehicle Greenhouse Gas Emissions (GHG)

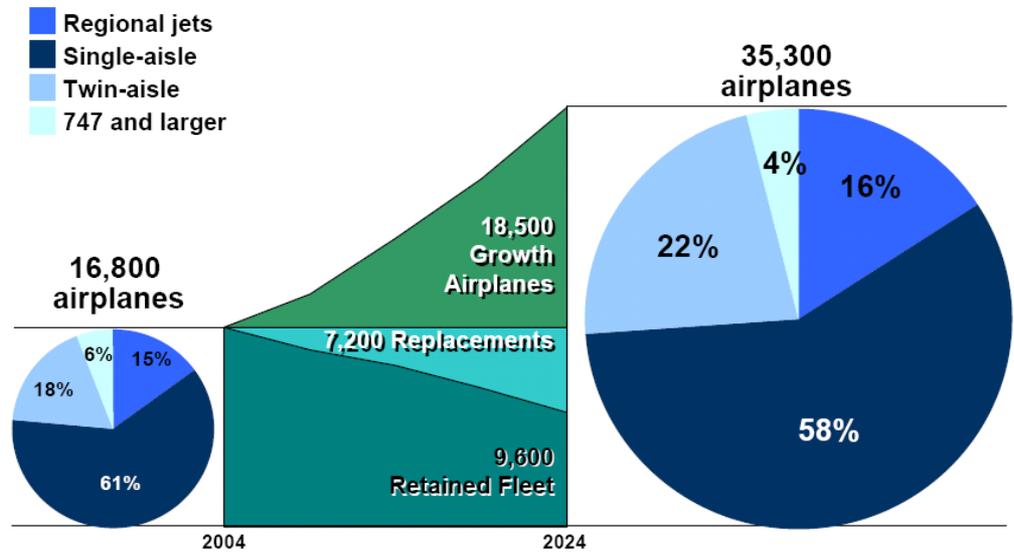
Increased Use of Aluminum has Avoided More Than a Billion Metric Tons of GHG Emissions Since 1990



Source: IAI

Part of the solution: Aerospace

- The world fleet will more than double in the next two decades

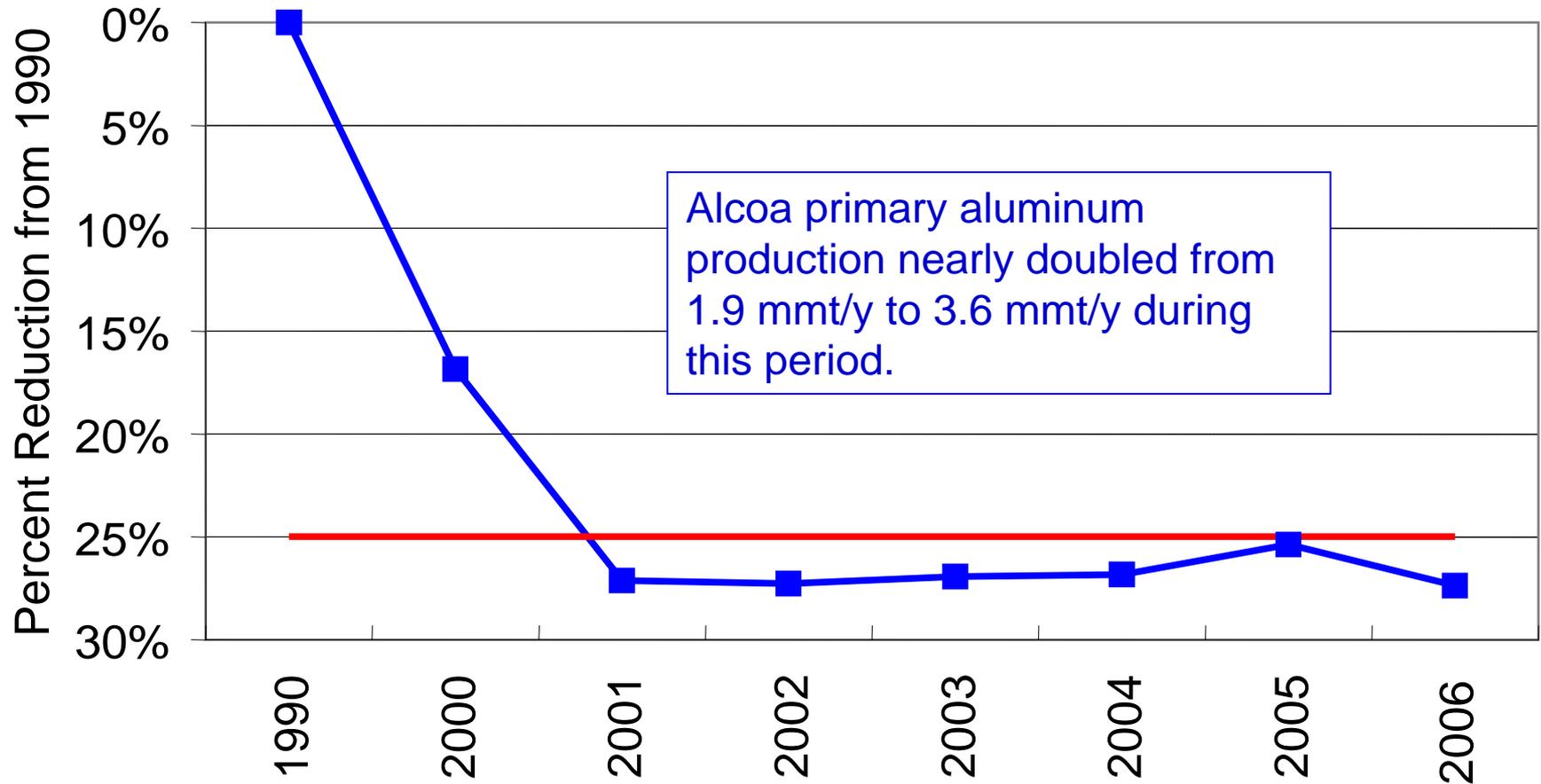


Source: Boeing 2005 Current Market Outlook

- Alcoa is the leading supplier and innovator in aerospace
 - Historic durability, inspectability
 - Alloy and product form flexibility
 - Aluminum's weight/strength ratio creates new opportunities for sustainability:
 - Reducing engine noise
 - Reducing emissions
 - Reducing fuel consumption

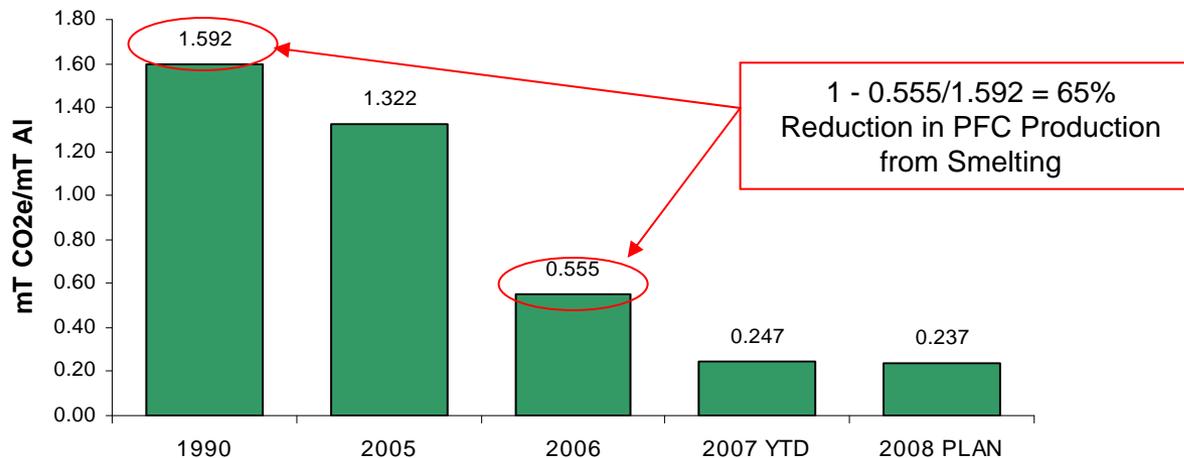


Part of the solution: Reduced GHG Emissions at Alcoa Facilities



PFC Emissions

Wenatchee Plant Average PFC Performance



	PFC Based CO ₂ e MT CO ₂ / MT-AI	Stoichiometric CO ₂ MT CO ₂ / MT-AI	TOTAL CO ₂ MT CO ₂ / MT-AI
1990	1.592	1.22	2.812
Prior year data does not exist			
2005	1.322	1.22	2.542
2006	0.555	1.22	1.775
2007	0.247	1.22	1.467
2008	0.237	1.22	1.457

PFC Based CO₂e = Equivalent CO₂ units from production of CF₄ & C₂F₆ as a result of side reaction during anode effects. This is outlined in a Voluntary Aluminum Industrial Partnership MOU between Alcoa Inc. and the EPA in February 2001.

Stoichiometric CO₂ = The CO₂ produced by reducing alumina to aluminum via the use of carbon anodes and molten cryolitic bath solution (aluminum smelting process).

TOTAL CO₂ = The sum of the first two figures equals the CO₂ footprint of Wenatchee Works.



Aluminum: Part of the Climate Change Solution

- Aluminum lightweighting saves energy and emissions in automotive, truck, rail, aerospace and other applications
- Recycling
- Emissions saved by aluminum lightweighting can offset the climate impact of aluminum manufacturing
- Aluminum can be a greenhouse-neutral material in the foreseeable future



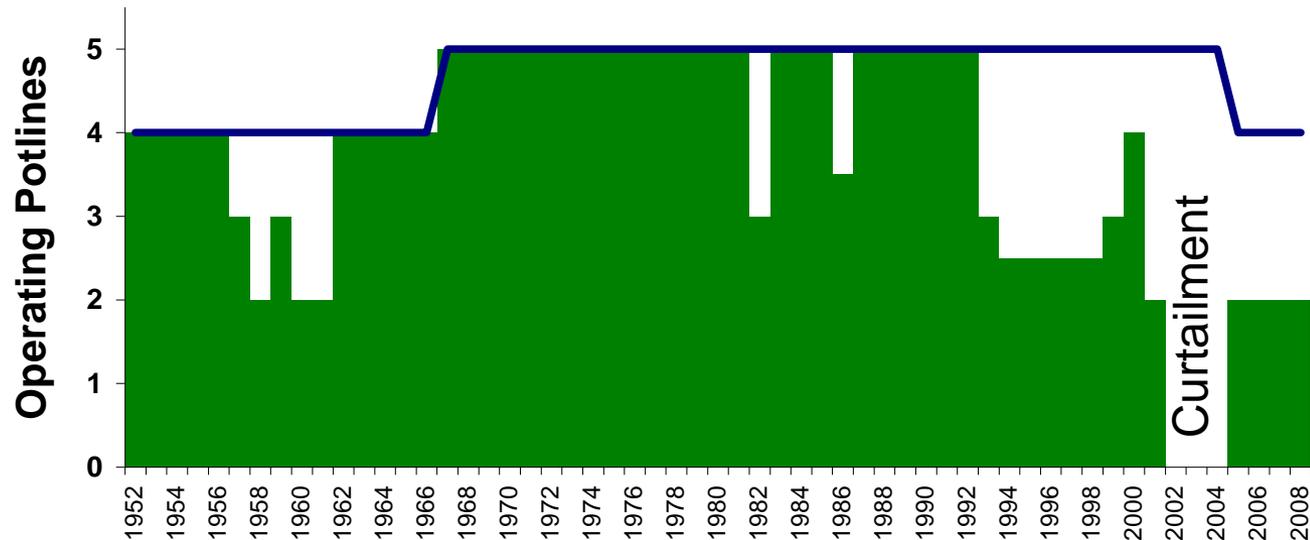
- **189,600 mt/year capacity**
 - **4 Potlines (2 operating)**
- **2,800 acres in Chelan County, WA**
- **390 employees**

- **Smelter & Casthouse**
 - **54 Years in operation**
 - **Well capitalized & maintained**

- **Products: Primary, Foundry**



- Alcoa Came to Chelan County in 1952
- Brought Family-Wage Jobs – created the “middle class”
- Used Surplus Power that Helped Develop and Pay for the Hydroelectric System
- 1957 Agreement Promised to Pay for 23% of Rocky Reach for 50 years– Enabling Construction
- Alcoa is an vital economic and social force in our community



Primary Aluminum Industry



Major Cost Elements



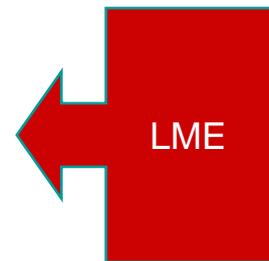
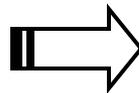
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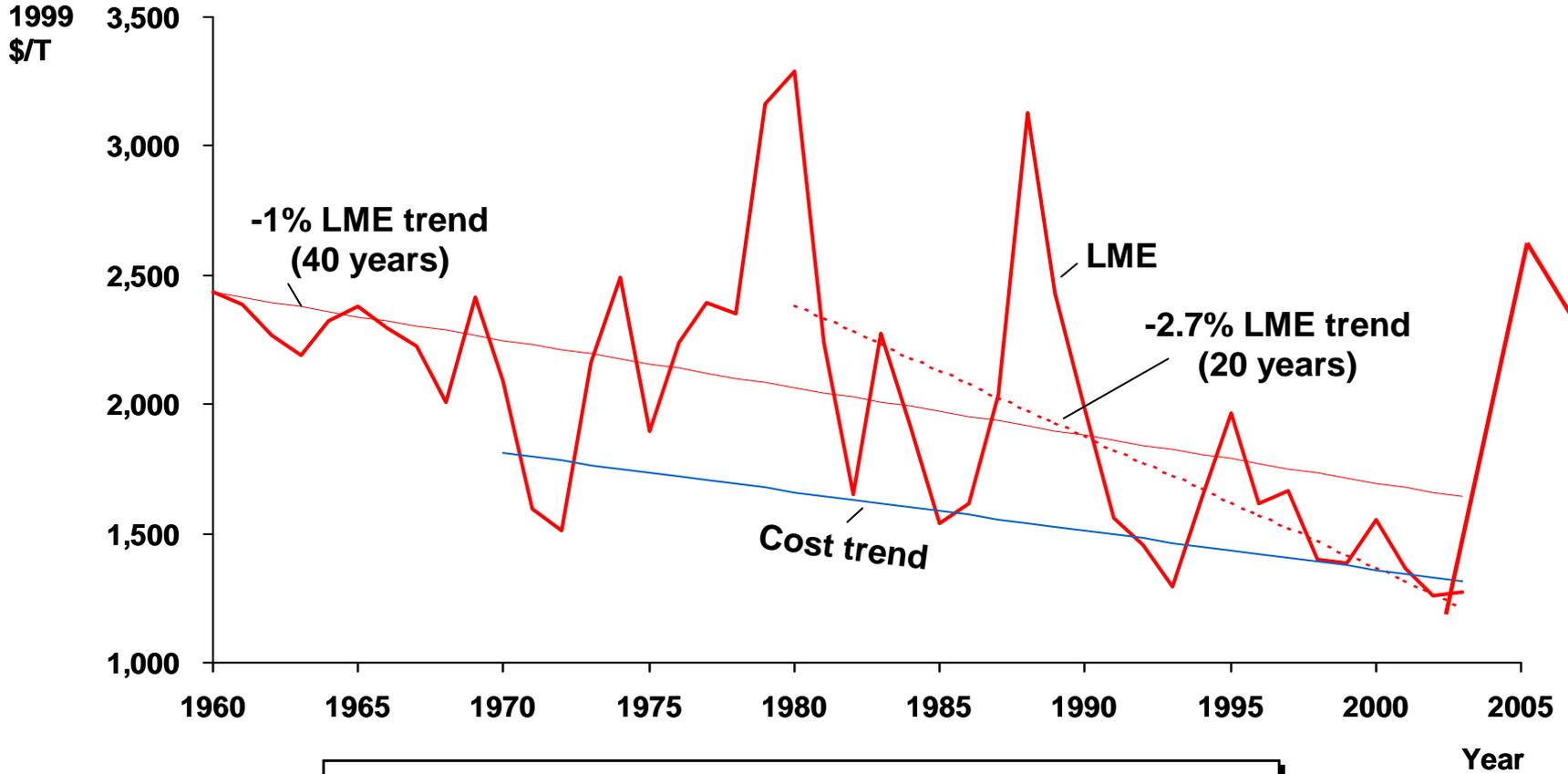


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A global commodity, with prices set on the London Metals Exchange (LME)

Long-Term Price Decline in Primary Aluminum (With Large Swings)

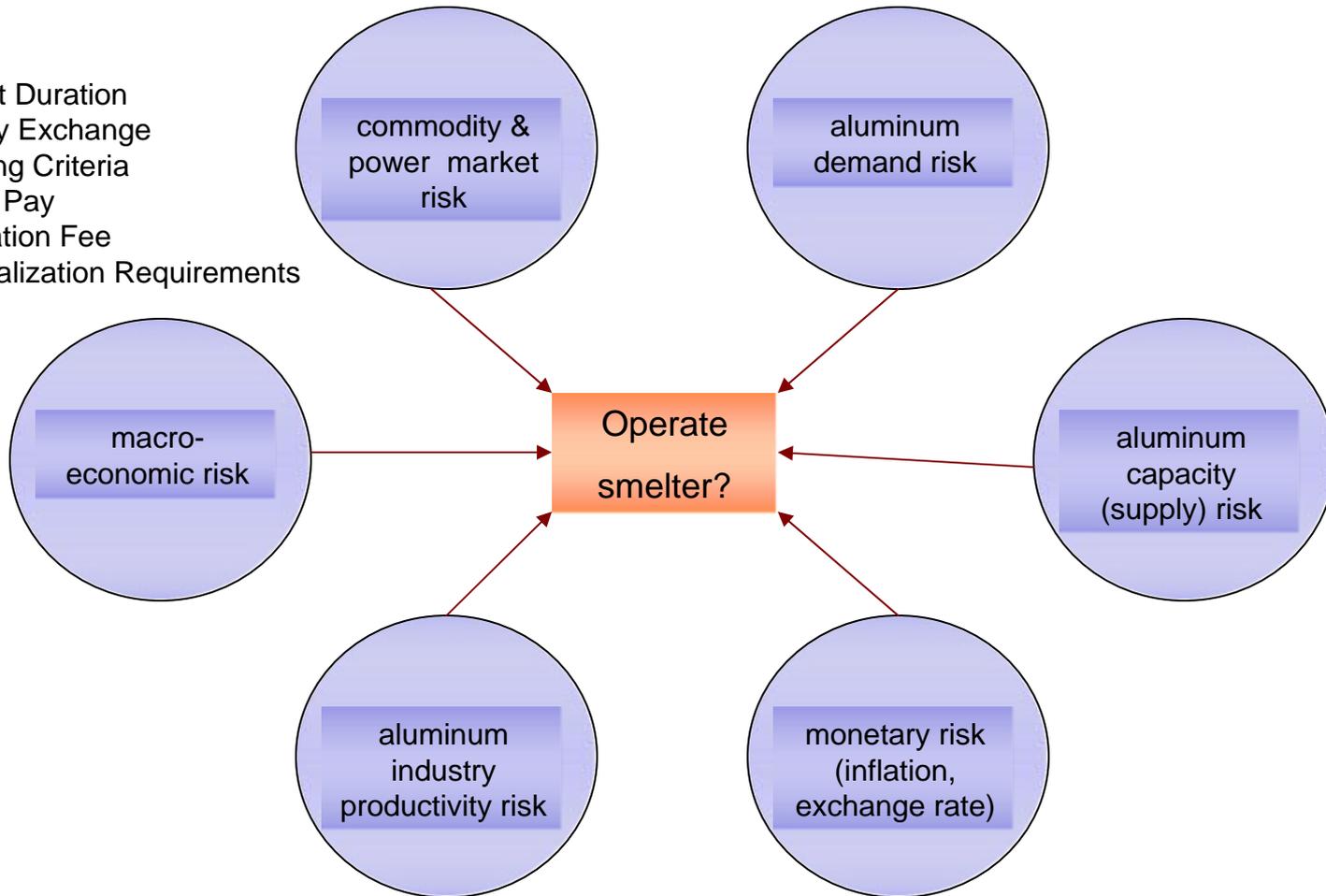


Price decline driven by cost reductions

- Technology innovation
- Productivity improvement
- Move to lower factor cost countries

Thus, Wenatchee Smelter faces several risks...

Contract Duration
Capacity Exchange
Operating Criteria
Take or Pay
Termination Fee
Collateralization Requirements





Why is this contract important to Alcoa, Inc?

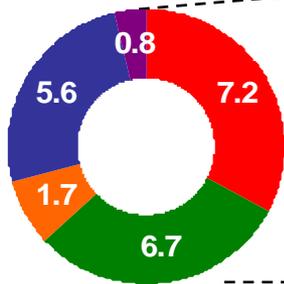
- Alcoa's future position as a leader in primary aluminum production will be dictated by our access to economical energy supplies
- Global aluminum demand expected to double by 2025
 - Driven by two "mega-trends"
 - Climate Change
 - Global Urbanization
- To maintain Alcoa's market share to meet this demand, we must maintain existing portfolio of smelters plus develop new smelters
 - Requires renewal of existing power contracts plus development of thousands of additional MW



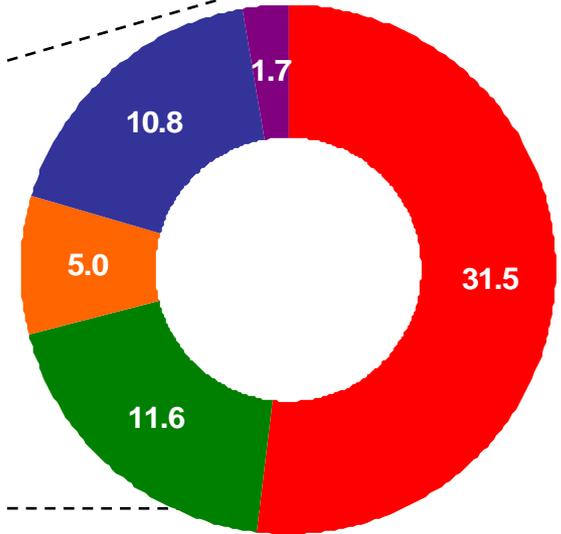
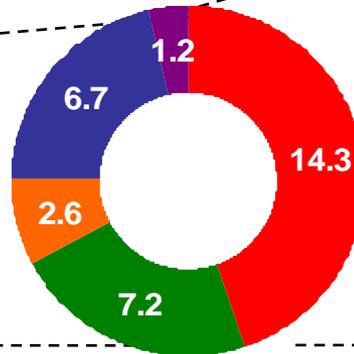
World Aluminum Consumption (MT)

2020E: 60.6M

1998: 22M



2005: 32M



Asia	+7.1	+17.2
North America	+0.5	+4.4
E. Europe, CIS & Other	+0.9	+2.4
Western Europe	+1.1	+4.1
Latin America	+0.4	+0.5

Source: CRU; McKinsey & Co



Why is this contract important to Alcoa, Inc?

However...

- Global Energy Trends are Challenging
 - Energy demand is increasing, especially in developing countries
 - Limited “stranded resources” and competition is fierce
 - Prices are rising (fuel, capital costs)
 - Environmental regulations have added a new layer of cost
 - Climate Change regulations will continue to grow in importance

- Thus, extending life of Wenatchee Works enables Alcoa several corporate advantages:
 - Avoid the cost of building replacement capacity for Wenatchee Works somewhere else
 - Clean renewable hydropower supports corporate sustainability goals and mitigates carbon risk
 - Supports a financially healthy existing smelter beyond expiration of current power contract



- Under terms of the new contract, power price effectively doubles for the smelter
- Provisions of the contract make this a “must run smelter”
- Therefore, it is essential to have additional power over current contract – 3 lines worth. This leads to:
 - higher production and more employment
 - higher probability of sustainable operation
- Profitable aluminum smelting is very sensitive to:
 - price of alumina, aluminum, and electricity
 - variations in availability of electricity
- **Bottom line:**
 - *power supplied for 3 potlines likely results in sustained smelter operation for life of contract*
 - *power supplied for only 2 potlines unlikely to result in continued operation of smelter*



Why is this contract important to the Community?

- **Designed to ensure aluminum production and associated economic benefits**
 - Must use power at Wenatchee smelter
 - Strict Operating criteria and termination fee inhibit curtailment

- **Risk Mitigation**
 - **Alcoa agrees to pay full costs of generation for 25% of hydro system**
 - Alcoa faces production & market risks, not the ratepayers

- **Hydro-system operation**

- **Economic Impact of Alcoa**

- **Community Partnerships/Corporate Citizenship**



Why is this Contract Good for the Community?

- **Alcoa's Annual Economic Impact – Based on 3 potline operation (2006\$)**
 - **Local Spending - locally purchased goods & services, including contractors**
 - \$20 million
 - **Direct Wages & Benefits**
 - Assume 450 employees for 3 potline operation
 - Each job valued at \$93,000 (per Conway study)
 - $450 \times \$93,000 = \41.85 million
 - **Indirect “Spin-off jobs”**
 - Conway indicates 1.7 indirect jobs for each direct job
 - Assume average wages/job in Chelan county = \$33,500
 - $1.7 \text{ indirect jobs/direct jobs} \times 450 \text{ direct jobs} \times \$33,500/\text{indirect} = \25.63 million
 - **Local taxes, including property and sales & use taxes**
 - \$1.3 million
 - **Direct local contributions (Corporate gifts)**
 - \$150,000

- **Total = \$89 million per year x 17 years = \$1.5 billion**

Good for the Community - Continued Partnerships

Solar Project

Alcoa purchased and employees installed \$450,000 worth of solar panels for local schools and agencies

In 2006, revenues from these panels in partnership with CPUD SNAP program generated \$20,000 for Chelan schools & non profit agencies.



Support our Troops

To date, volunteer committee has raised \$50,000 and sent 1,178 packages to local service members overseas.

Alcoa's Ridge to River Relay

Premiere regional multi-sport race, community signature event and local fundraiser – Alcoa naming Sponsor through 2011





Why is this Contract Good for the Community?

- Our future is linked to the future of our communities. We are driven by the conviction that part of being the best company in the world is being the best company in our communities.

- Thus far in 2007 ALCOA has given approximately \$142,000 to the Wenatchee Valley through Alcoa Foundation grants and plant donations:
 - Disaster Relief to City of Wenatchee \$25,000
 - Erase Debt & Sponsor 2007 Season Performing Arts Center - \$15,000
 - Donated \$30,000 to City of Wenatchee for new city entrance sign
 - Special Olympics \$5,000
 - Habitat for Humanity - \$5,000
 - Chelan-Douglas Land Trust - \$10,000 Interpretive Conservation and Accessible Trail
 - Wenatchee Valley College \$21,000 Workforce Skill Development
 - Mustard Seed Neighborhood Center - \$8,000 Literacy Enhancement
 - Wenatchee River Salmon Festival - \$2,000 Sponsor Salmon Festival
 - Mike Utley Foundation - \$2,000 Dam2Dam Sponsorship
 - Miscellaneous Local Donation Requests - \$19,000



Long Term: Comparison to CPUD Selling Surplus Power

- **Annual Benefit from Alcoa Contract is estimated at least \$89 million per year**
 - Plus the risk Alcoa assumes from Chelan PUD
 - Plus the up-front payments Alcoa will make
 - Plus concessions to our current contract

- **Annual Benefit from selling an equal amount of surplus power is estimated to be of same magnitude.**

- **Thus, the benefits (economic and otherwise) of Alcoa contract to the community is likely more than the benefit of selling power at market**



Employees' Perspective

