Alcoa's Best Practice Transfer Program

One is Not Enough!

Alcoa - Three Business Groups

Global Primary Products

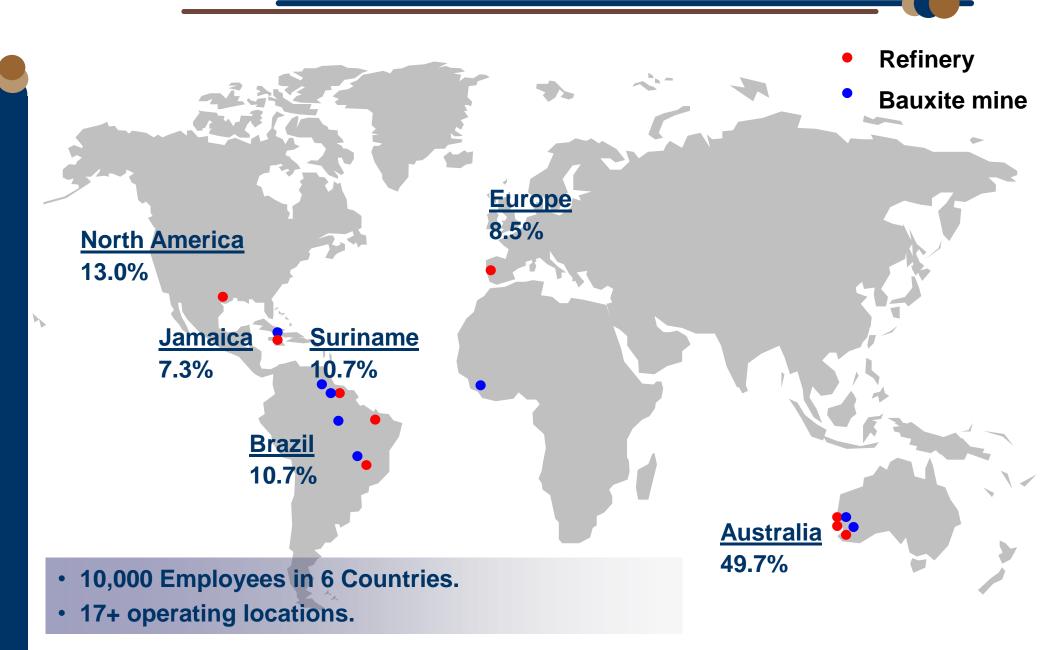**Global Rolled Products**

Engineered Products and Solutions

Refining Global System

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- Refinery
- Bauxite mine

Europe
8.5%

North America
13.0%

Jamaica
7.3%

Suriname
10.7%

Brazil
10.7%

Australia
49.7%

- 10,000 Employees in 6 Countries.
- 17+ operating locations.

Our Journey

Broader Knowledge Management

HR Integration

Learning & Development Integration

Knowledge Lifecycle for Employees

Focus Plant Initiative

Dynamic Capability

Wikis/Virtual Worlds

Operating Reviews

KMLT

Emeritus Programme

2004

2007

2011

1st Community

In Business Plans

Broader Reach

1st BP Transfer

Best Practice included in Job Descriptions

GPP Communities showing value

Best Practice Performance Objectives

Community Check in RfA

Richer Communication Tools

Share Point v3

First GPP & PM Communities

Development of Global Virtual Teams

50th Community

Wheels Impact Award

Alcoa Inc. Award

First Communities Retired

Virtual 3D Presence

Best Practice Transfer/Communities

Alcoa's Best Practice Transfer Program

- The program enables **groups of people** who have similar roles to **deepen their expertise** through **ongoing interaction** and apply this to alter operating and maintenance routines to our current best method.

- The initial problem was a lack of standardisation across our locations in areas where it was possible and profitable.

- **Communities of Best Practice** are the structures we have put in place to address this issue.

- There are limitations to what Communities can do.

- One method alone is not enough!

Do Communities actually work?

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Absolutely!!

⬡ **150+ Best Practices** documented

⬡ Repaying the **$$$** investment **x 10**

(Pay back is higher, but hard to track)

Communities of Best Practice

best practice

- **1700 people per month** collaborating

- **15 - 20 conference calls per month** connecting people to converse

- **Formal & Informal Transfers** - in operations, maintenance, technical, reliability, H+S, finance and environmental

Limitations of Communities

- Our Communities are aimed at helping people involved in **medium term problem solving** – not short term fixes. They don't always identify **systemic problems** that require a suite of practices to fix.

- As our Communities are largely virtual, identifying and transferring a set of practices is very difficult

- With highly diverse virtual groups, there is **risk of mis-communication** causing errors and confusion, slowing transfer

- Adjusting a practice to local context is **extremely difficult to do virtually**

Creating specific teams and getting people face to face

- Global Virtual Teams

  - Created within and between Communities

  - Defined goals to produce or deploy practices to a deadline

- Focus Plant Events

  - Collect experts to solve large problems in specific areas and transfer to all locations

- Operating reviews

  - Audit Best Practice implementation, create 3-5 year roadmaps for improvement for whole location

Three Strategies, One Goal

best practice

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Communities of Best Practice

Learning, Sharing, Knowledge Exchange, access experts, virtual life

Best Practice Transfer

Operating Review and Focus Plant Initiative

System improvement on a large scale, face to face, assemble expertise, audit best practice
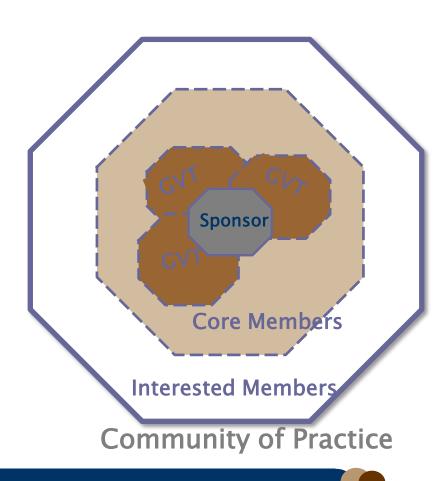
Global Virtual Teams

Defined objectives, short term projects, link Communities, work virtually

Global Virtual Teams

- We have seen some members within a Community wanting to **achieve more -** delivering on KPI's and completing projects & trials
- Membership has become **a requirement** of certain positions (e.g. Engineers) ,
- The business has formally requested some Communities **achieve specific targets** in **2010 business plans**
- These developments have led to an emergence of what is defined in academic and business literature as **'Global Virtual Teams'**
- Within the 'GVT' **membership & roles flex** as they deal with specific problems
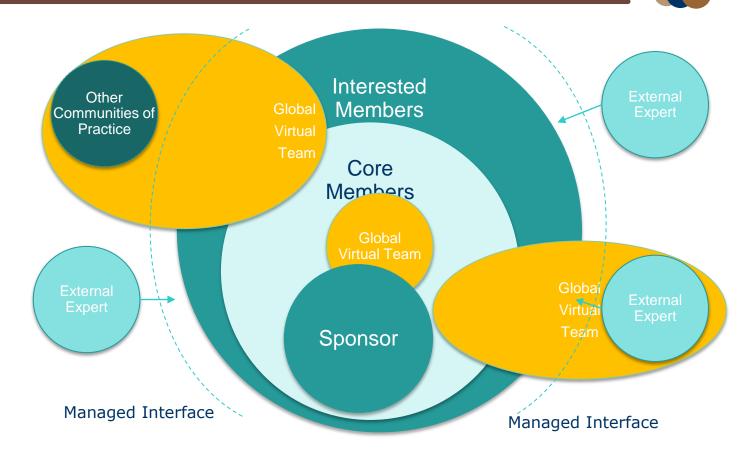- The entire community remains as a place of learning and sharing

GVT

GVT

Sponsor

GVT

Core Members

Interested Members

Community of Practice

best practice

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Community of Practice

Other Communities of Practice

Global Virtual Team

Interested Members

External Expert

Core Members

Global Virtual Team

External Expert

Sponsor

Global Virtual Team

External Expert

Managed Interface

Managed Interface

Supporting Tools

Social Tools
- Wikis
- Collaboration Tools

Formal Tools
- Technical Archives

Experts
- Internal Expert Directory

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Focus Plant Initiative

Strategy to accelerate the rate of improvement practices across GPP through the implementation of **best practices**
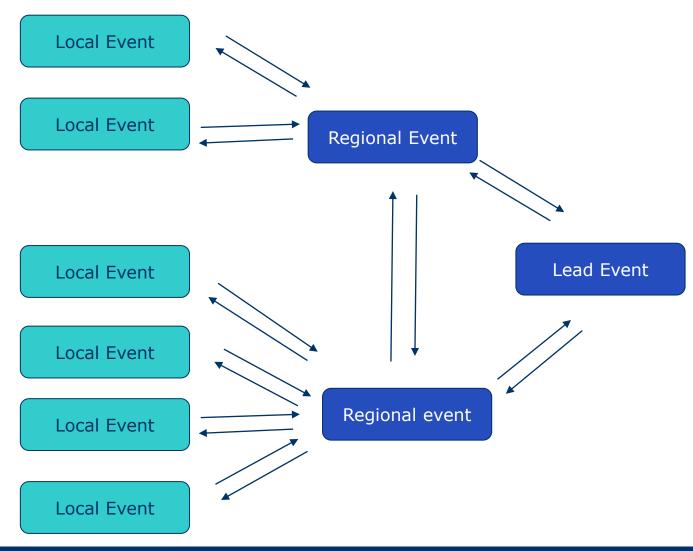
- Close gaps to benchmark levels at all plants in areas of major business opportunity
- Sustainable system improvements fully embedded in Alcoa's Business System
  - Process Management
  - Reliability
  - Operations
- Convene multi-discipline plant teams to major events at Regional Focus Plants to work on defining major gaps, agreeing on, documenting, and implementing best practice to close them
  - Quantified business case with significant financial impact
  - Discipline execution committed and tracked through degrees of implementation (DI)
  - Rapid implementation across all locations through cascading events

Focus Plant Events

Refining Regional Focus Plants as BP Disseminators

Operating Review

- Assemble a multi-disciplinary team to review performance in the areas of Operations, Technical, Reliability, Business System, People, Laboratory and External Factors

- Optimizing the production and equipment strategies to deliver both incremental and step changes to a location's cost structure over the next three years.

- Audit the performance of current best practices.

- Produce A3's that solve today's problems

- Consider alternative future scenarios and strategies that make a step change in performance

- Develop a summary of key enablers to move to the target state

- Solve one problem per team to Operator level

New Process Development (TDG)

New Equipment Development (TDG)

Best Practice Transfer
- Communities
- GVT's
- Focus Plant Initiative
- Operating reviews

Process Management (ABS)

New Plant and Expansion Design

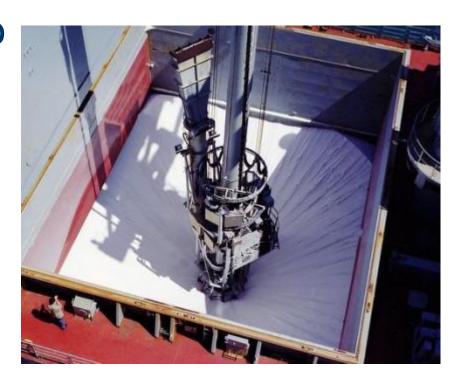**Improved Profitability within all Refineries**

Results

- This layered approach will drive Alcoa's system cost to the lowest quartile in five years
- Significant competitive advantage through cost reduction
- Typically reducing costs by around 3% per event