



Buckridge Group of Companies

澳大利亚工业能源管理

Energy Management Practices
In Australian Industry

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Energy Management Action Network
Guilin, China, 15 November 2011

Scope of energy use

- Asphalt
- Bricks (clay & AAC)
- Cement
- Civil and Mine Engineering
- Commercial Constructions
- Concrete
- Fibre Cement
- Insulation
- Metal Roofing
- Pavers
- Plasterboard
- Plumbing
- Quarries
- Residential Construction
- Roof Tiles
- Steel
- Transport
- Windows

Why Energy Management?

Government Regulation

- 1999 Voluntary Programs
- 2006 Energy Efficiency Opportunity Act
- 2007 National Greenhouse & Energy Reporting Act
- Nov 2011 Clean Energy Legislation Bill Passed



Strategic Advantage

- Diesel Price Volatility
- Gas International Price Parity
- Electricity Price Reflectivity
- Carbon Price Risk
- Green(er) consumers



Energy Efficiency Opportunities Program

Rigorous and Comprehensive Assessments



Leadership

People

Information, Data & Analysis

Opportunity Identification & Evaluation

Decision Making

Communicating outcomes

Six key elements

- 5 year Plan
- 80% coverage of energy use
- Evidence based



Leadership



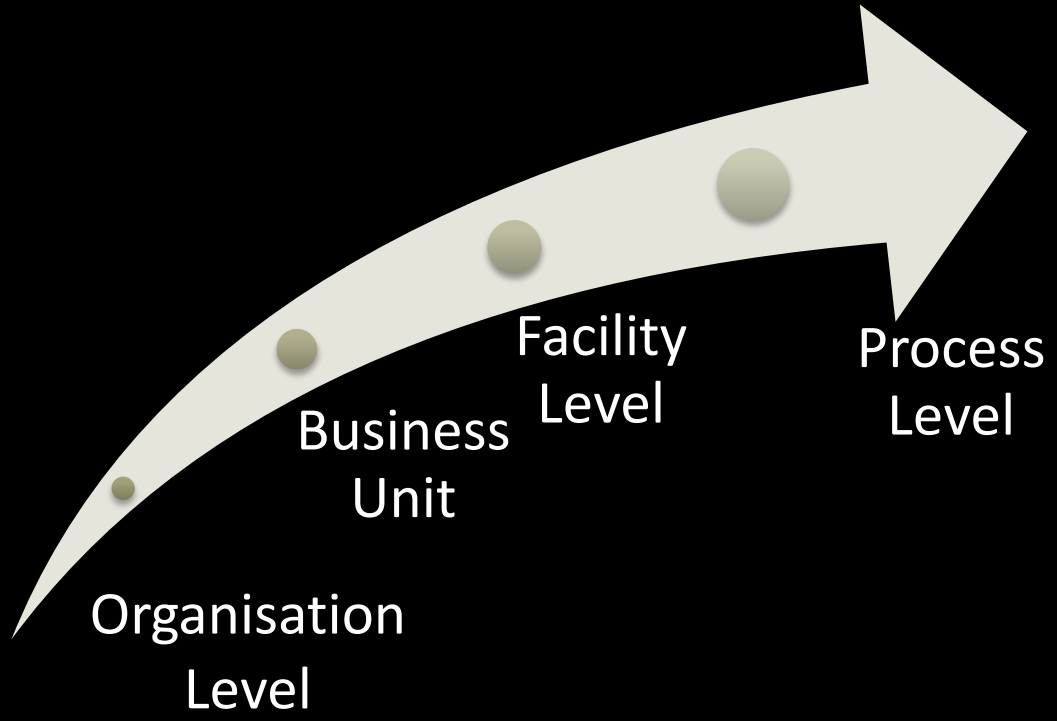
People

因人成事 - Success through the help of others

- Small coordinating teams
- Skilled, influential people
- Large implementing teams
- Diversity of people



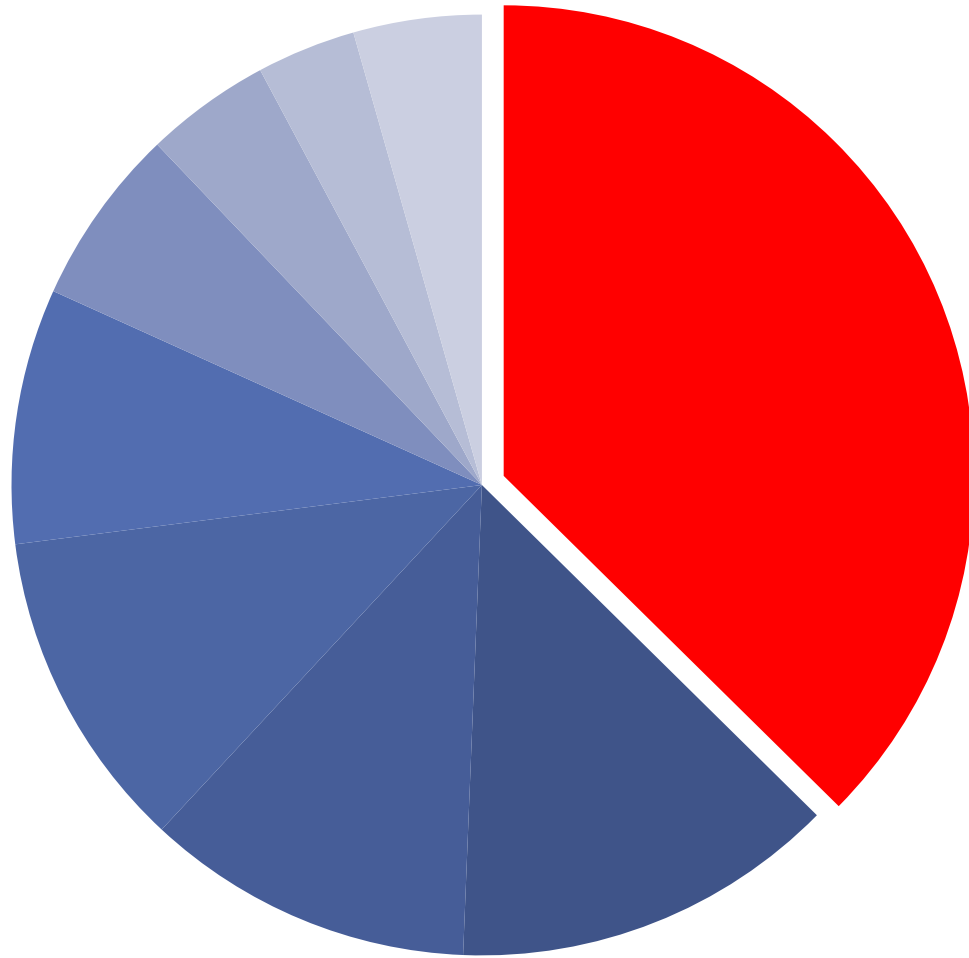
Information, Data, Analysis



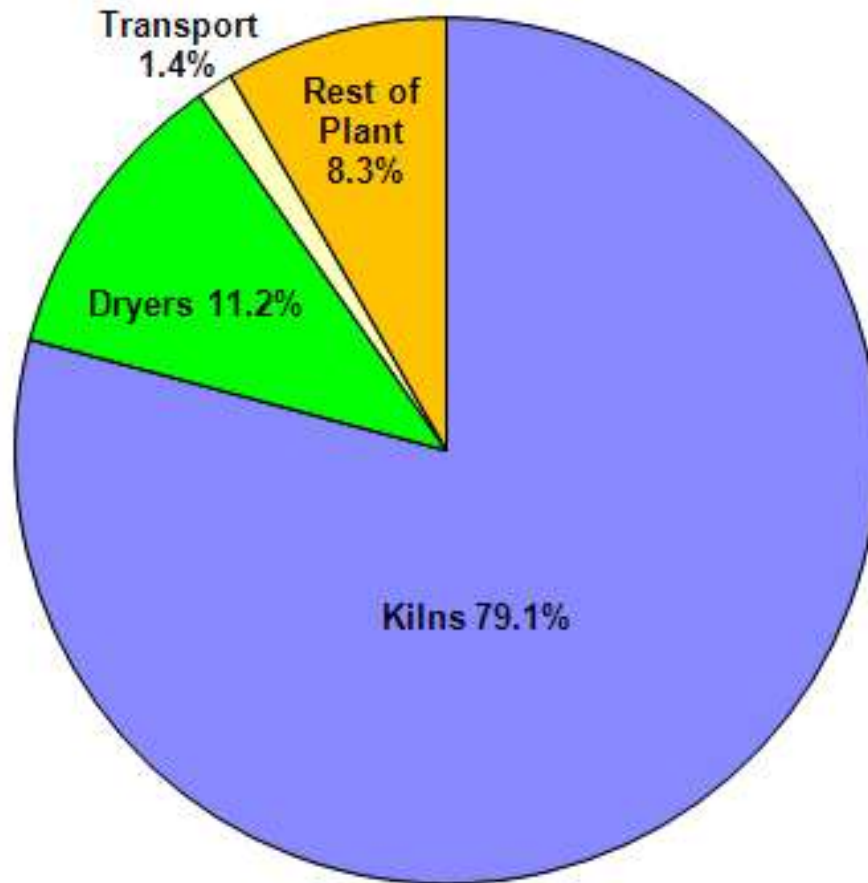
Source: thefinancialphilosopher.com



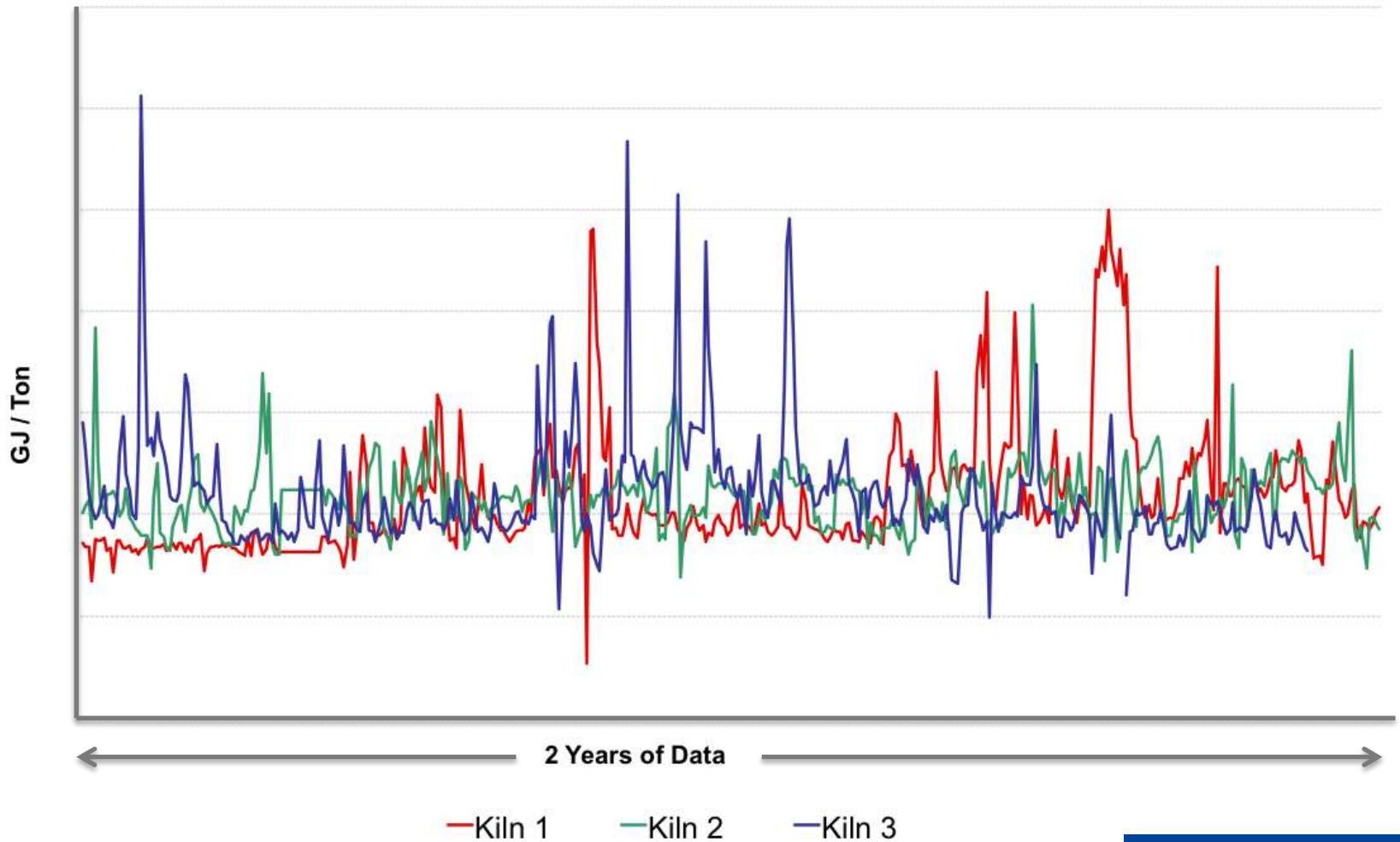
Case Study: Business Units



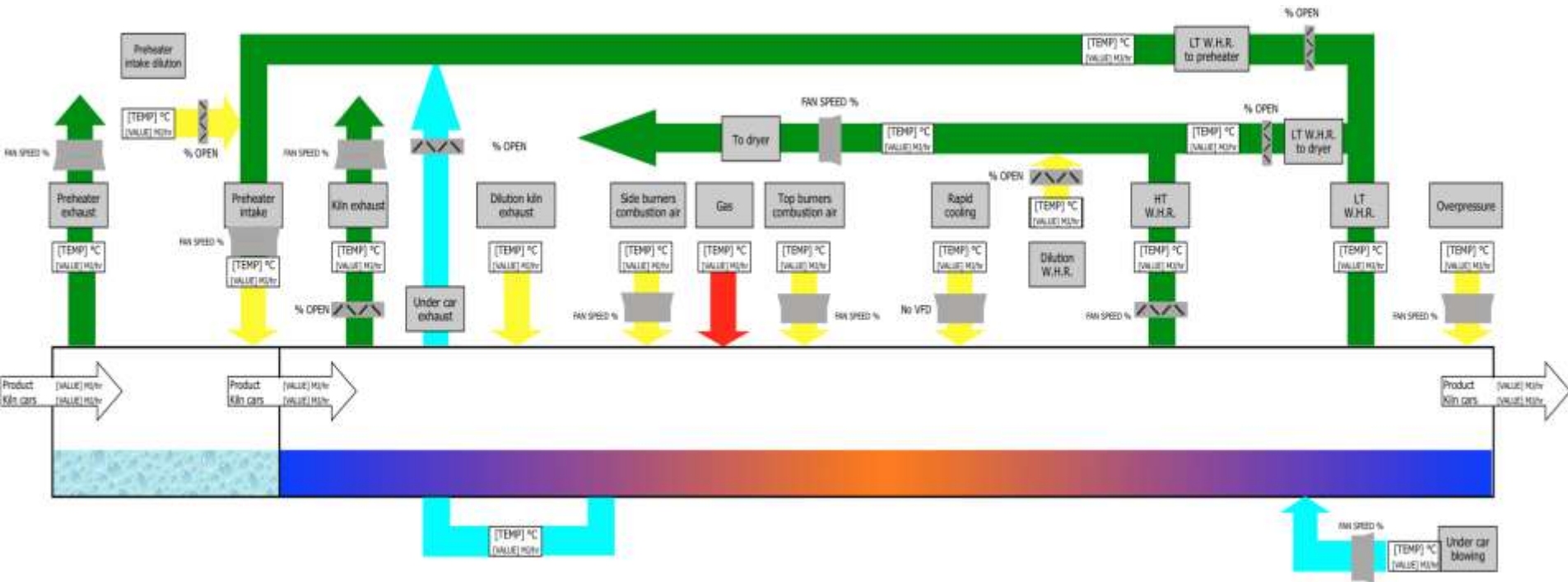
Case Study: Facility



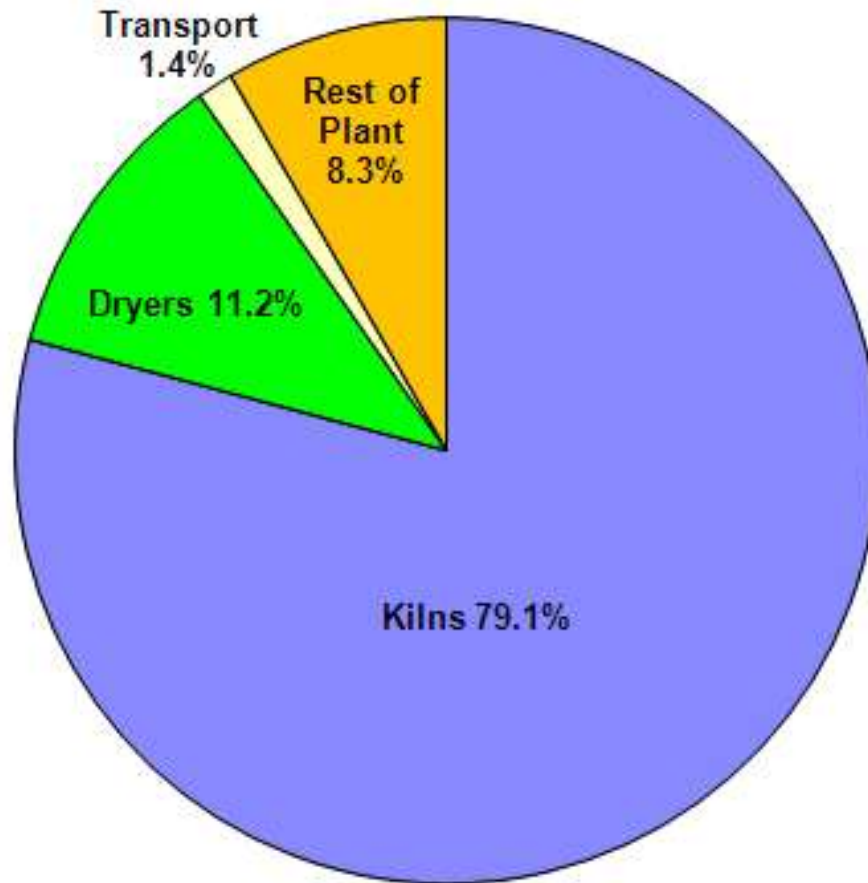
Case Study: Process



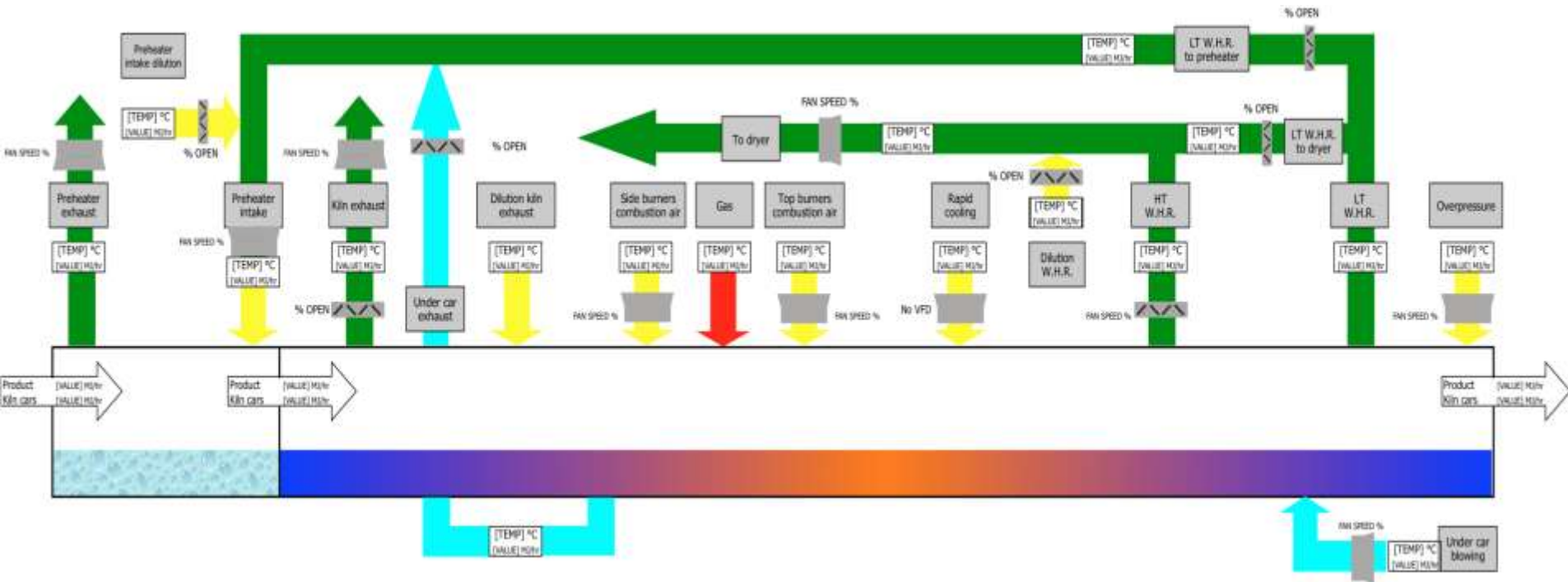
Case Study: Interaction of Processes = Energy Mass Balance



Case Study: Facility



Case Study: Interaction of Processes = Energy Mass Balance



Opportunity Identification and Evaluation

- Opportunity Identification Workshops
 - Invitation from General Manager
 - Participants with diverse backgrounds
 - Present and discuss data
 - All ideas welcome
- Evaluation
 - Multi-criteria decision analysis tool
 - Consider resource constraints
 - Cost benefit analysis – Pay Back Period
 - Leverage other benefits eg. Contracts, Grants



Decision Making and Communication

- Decision Making
 - Formal project proposals
 - Involve decision maker early
 - Links to other business priorities
- Communication
 - 'Tool-box' Updates
 - Management Updates
 - Promote Success



Results

- 200+ Ideas
- 95 Opportunities
- 47% Implementation commenced or Implemented
- Already achieved ~ \$13.2m RMB / yr

Additional Leverage

- Reduced energy leakage – theft, waste, cost
- Substantial improvement in Energy Contracts
- We now get paid to be energy efficient!
- Built Internal Capacity
- Award Winner for Energy Efficient Homes



Future Directions?

- Suggest Communications Strategy

BGC |

Questions?





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谢谢, 祝各位好运

Thank you for Listening
and
Good Luck on your Journey