

sasol
reaching new frontiers



The impact of the Ilima shift in light of the Power Conservation Programme (PCP)

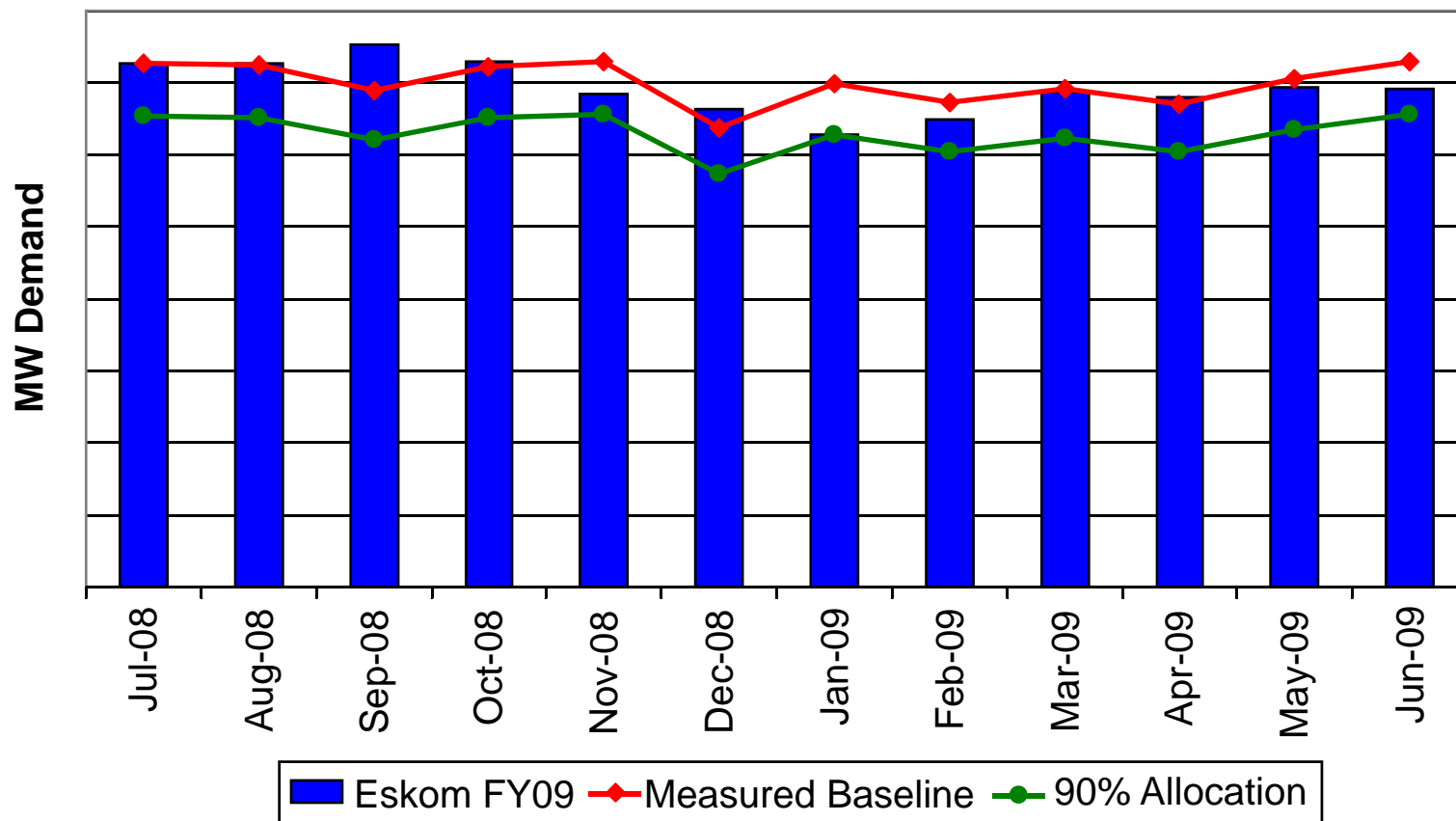
Storyline...

- Power Conservation Programme (PCP)
 - *Background*
 - *Effects on Sasol Mining FY09*
- Illima Shift
- Objective of this presentation
- Methodology
- Findings
- Conclusion

PCP - Background

- Measured demand baseline
 - 1 October 2006 to 30 September 2007
- PCP target: Save 10% of measured baseline
- Implementation date
 - 2010 ?
- Current proposed penalties
 - 1% > 90% PCP allocation: *R 2.80 / kWh*
 - 2-10% > 90% PCP allocation: *R 4.50 / kWh*
 - 10% - > 90% PCP allocation: *R 9.00 / kWh*

PCP - Effects on Sasol Mining





Illima Shift

- Illima shift function: Supplement normal production
- High production rate
 - *tons/CM/shift: 1.5 x to 2 x Normal shift production rate*
 - *Few sections producing*
- Coal conveyance infrastructure underutilised
- Operational Excellence (OE) initiative
 - *Increase normal production*
 - *Reduce illima shifts*

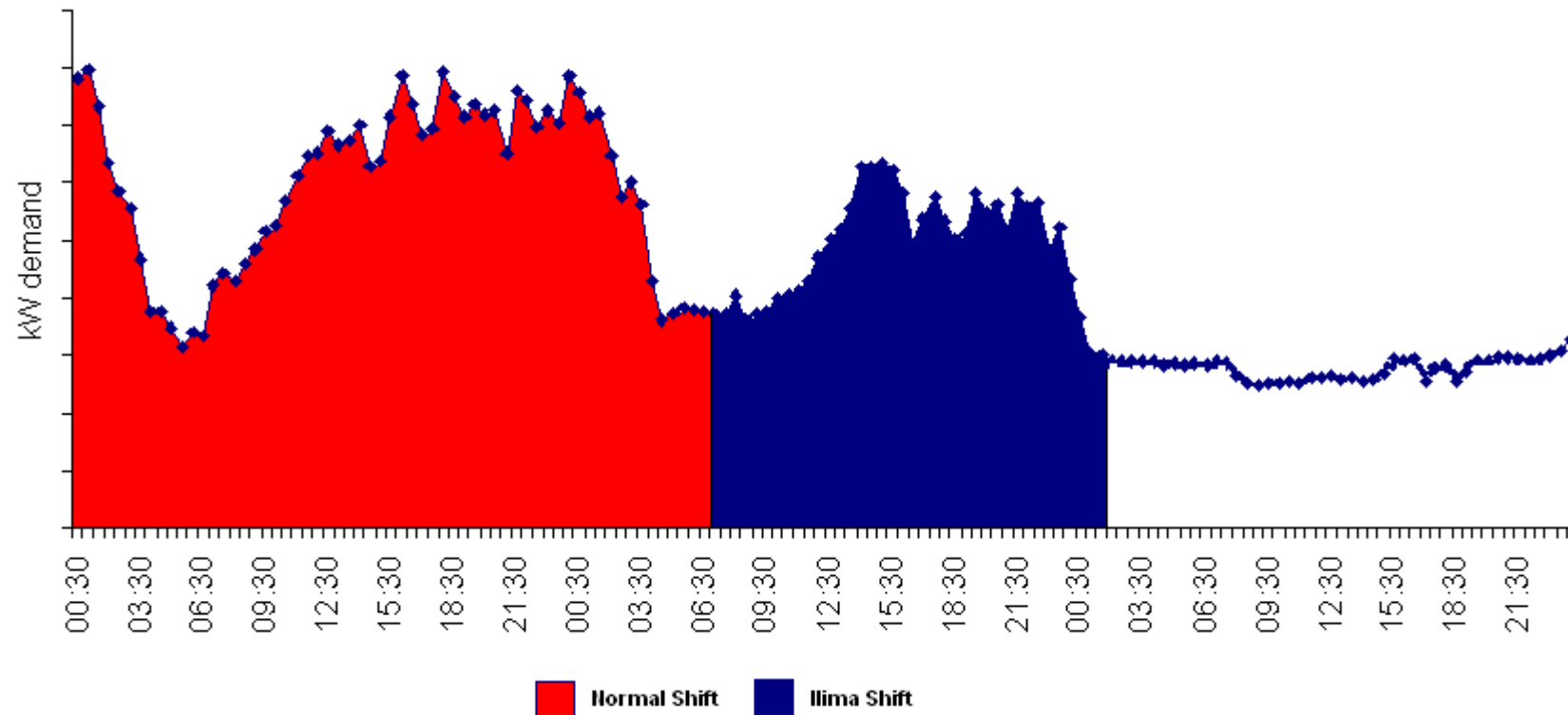


Objective

- To understand the impact of the Ilima production on the total power consumption of Sasol Mining



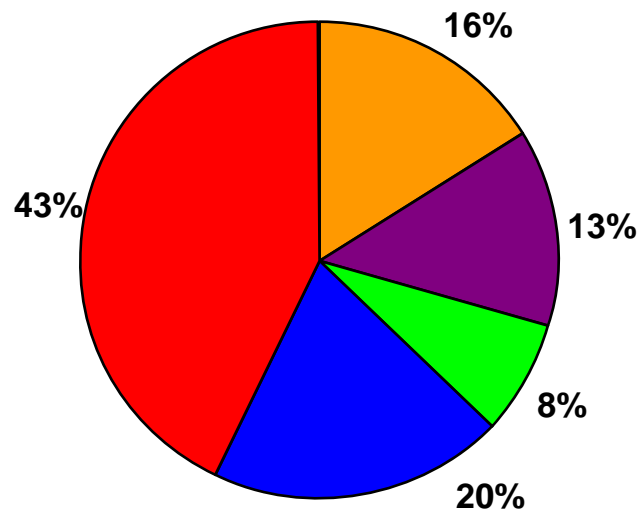
Methodology





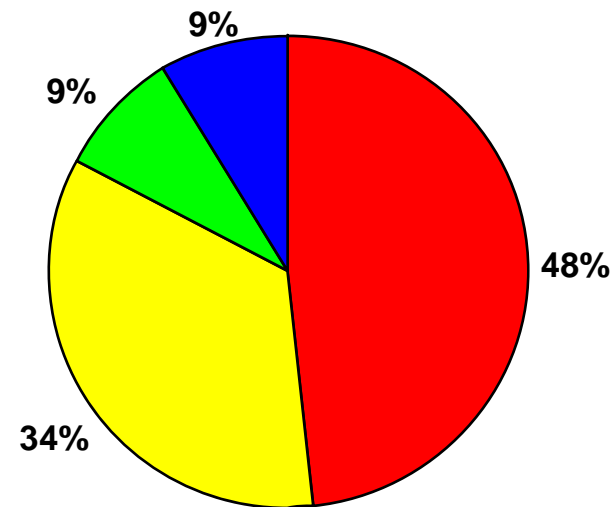
Methodology

Brandspruit base load



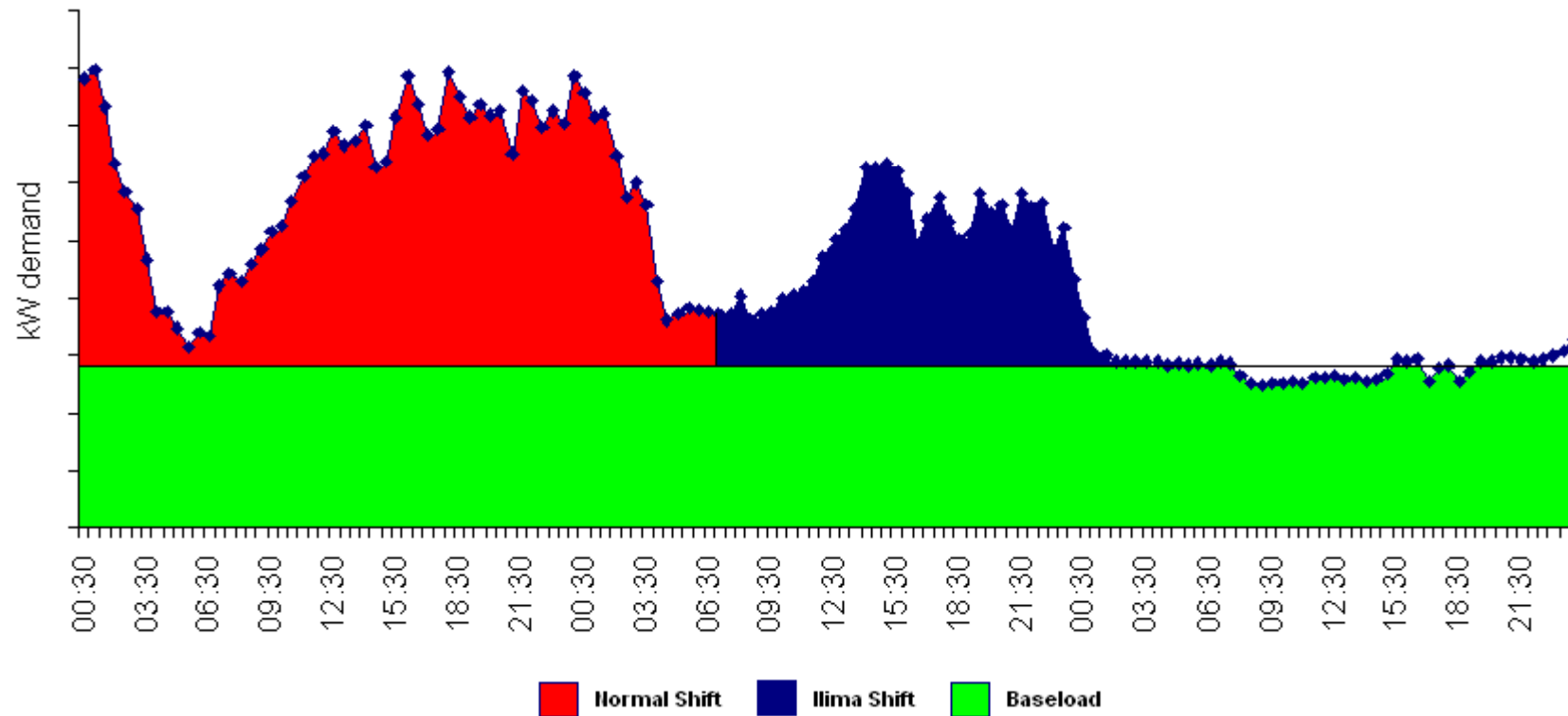
Buildings Workshop SCS Hostel Fans

Bosjespruit and Irenedale base load



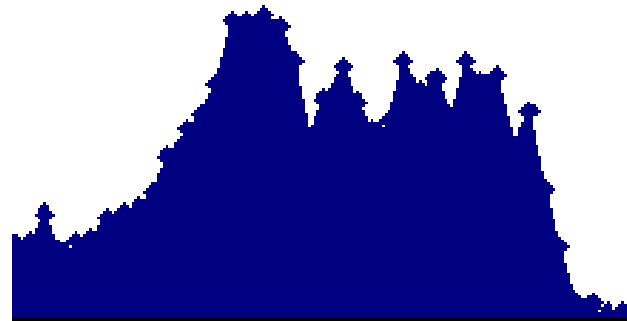
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Methodology

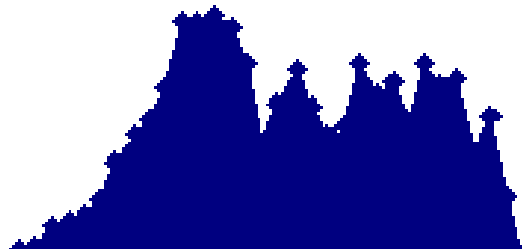




Methodology



Illima Shift Energy Consumption



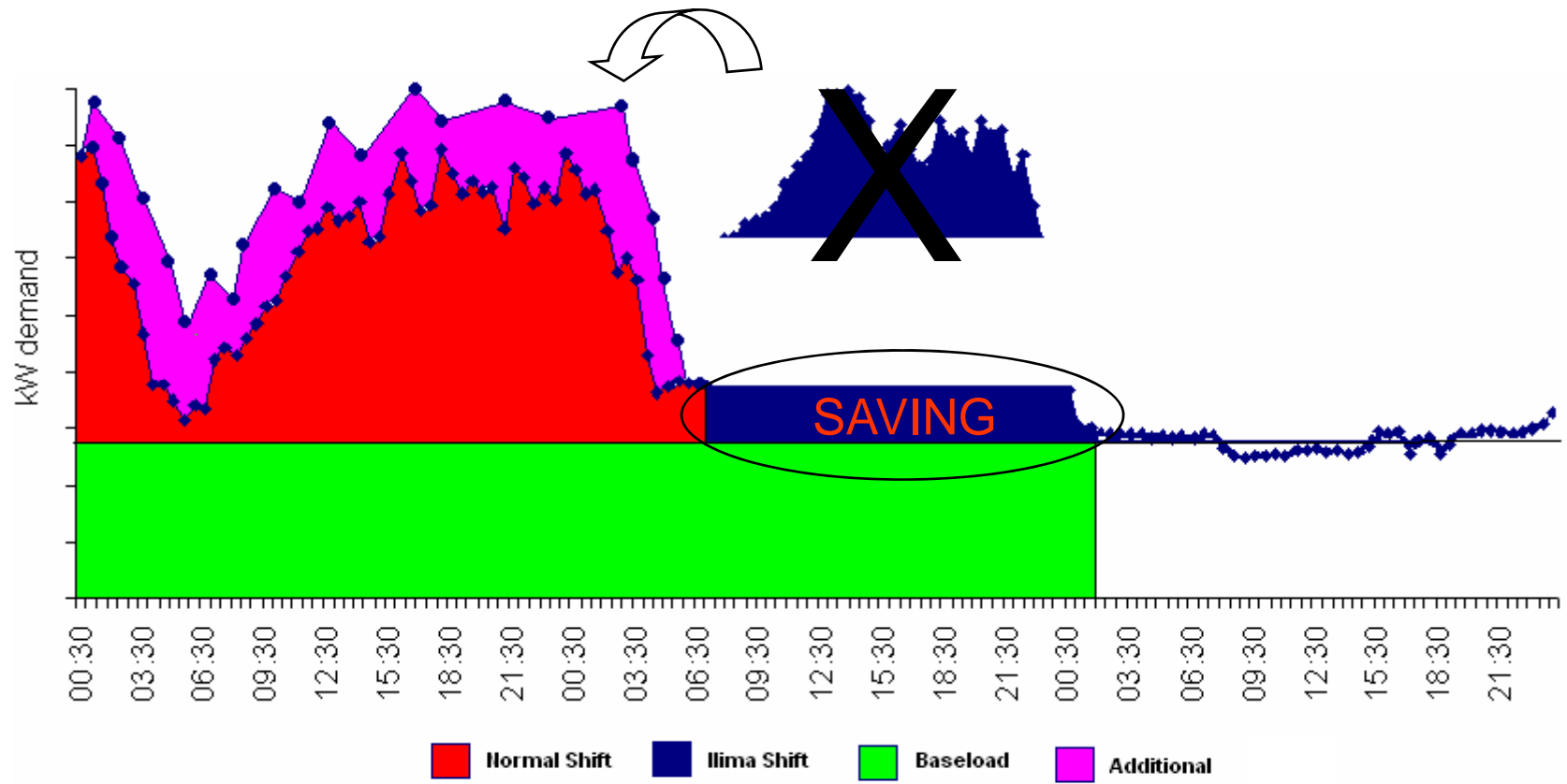
Production

and

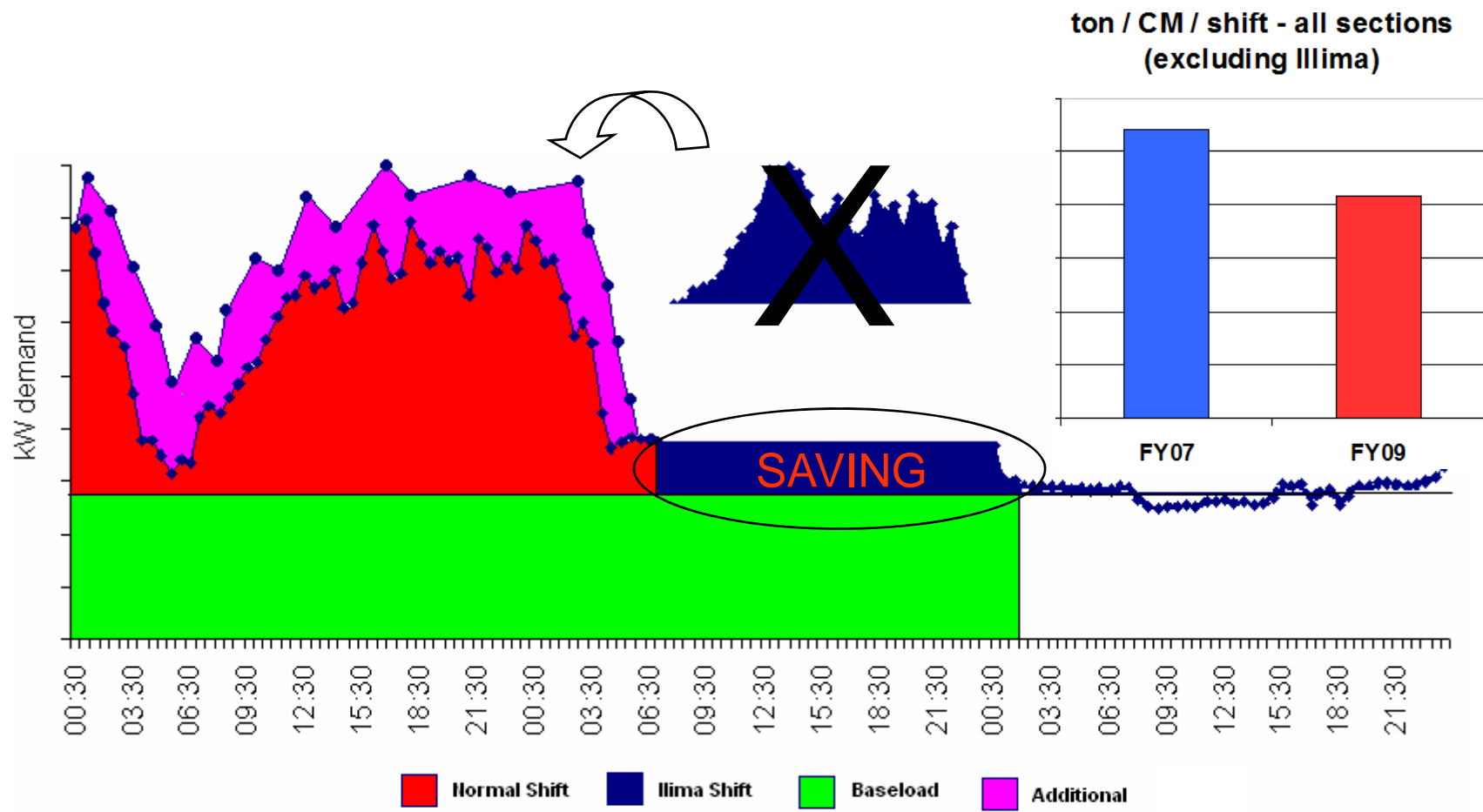


Coal Transport

Methodology



Methodology

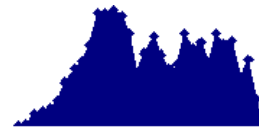


Findings

- Total illima production energy consumption FY09



- Production: 47 %



- Coal Transport: 53 %



- Potential saving on total consumption FY09

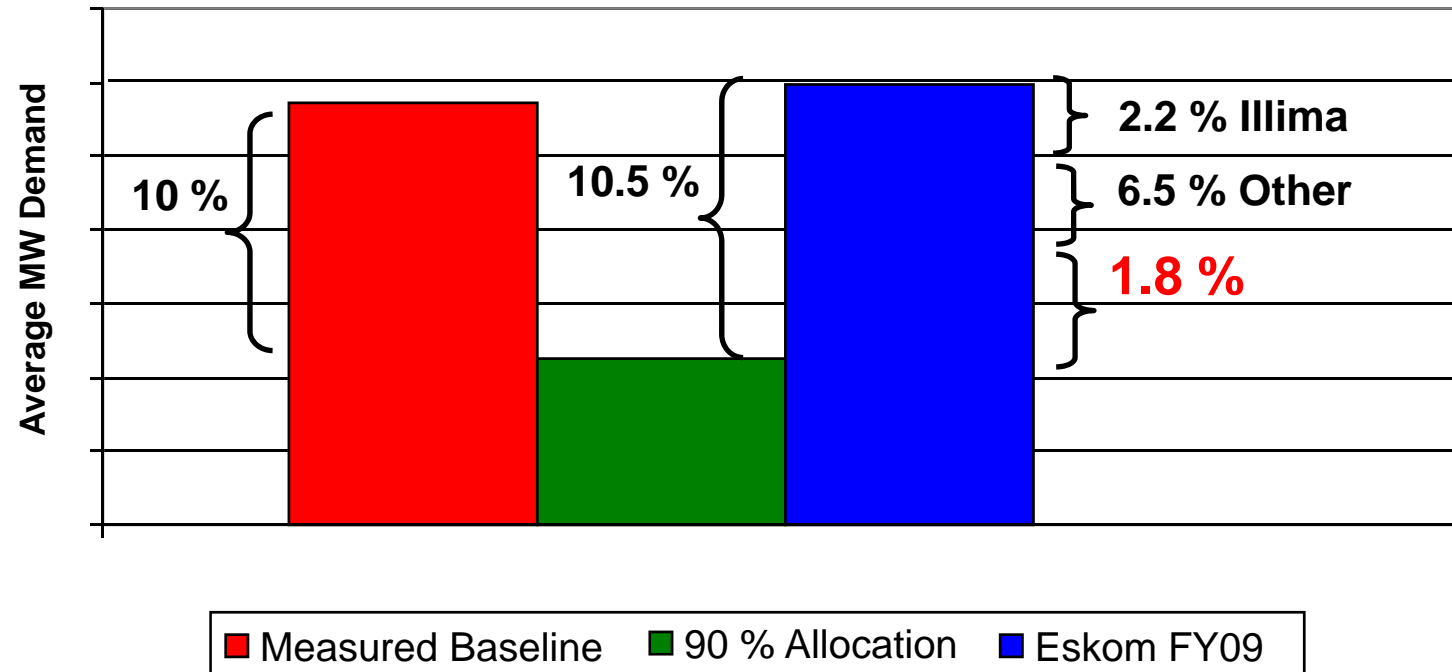
- 2.2 %

- Illima usage figure

- 4 kWh/ton



Findings



Conclusion

- PCP penalties high
- Illima Shift
 - *Not conducive to energy saving*
- Findings: Need to save 10.5 %
 - *Illima Contributes 2.2 %*
 - *Current energy saving actions in place to save 6.5% (3.2 % completed)*
 - *Currently developing further energy saving actions to close remaining gap of 1.8 %*



Questions?

PCP - Effects on Sasol Mining FY09

- Eskom MegaFlex kWh tariff at end of June 2009 was between *9 and 21 cents*
- Possible increase in Eskom Account FY09 due to PCP penalties could be up to 200 %