



South African Colliery Engineers Association

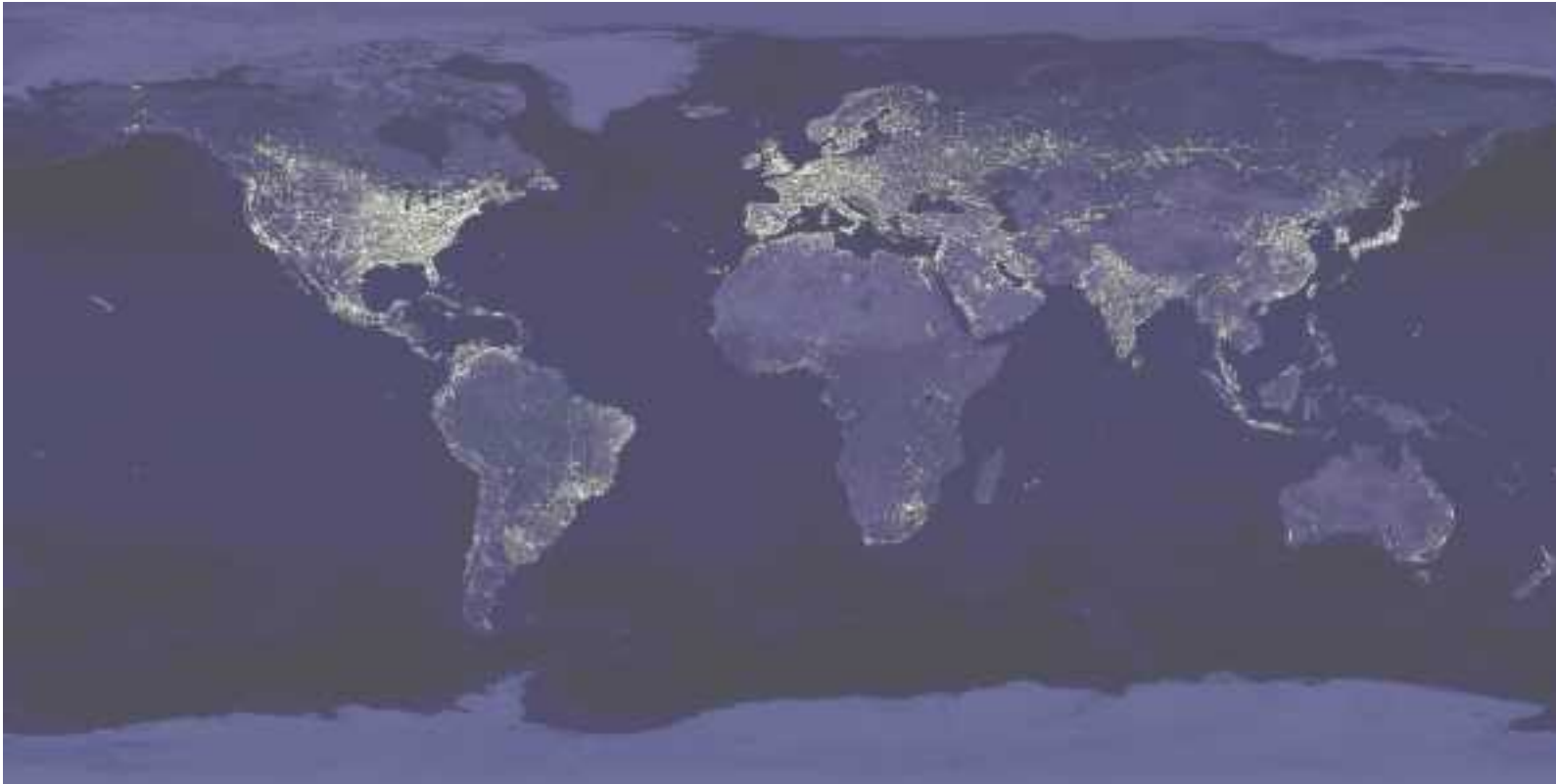
Strategy Review 2006

22 – 23 February 2006

Facilitator:
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A Premise for the Future

Composite satellite earth picture showing night-time luminance



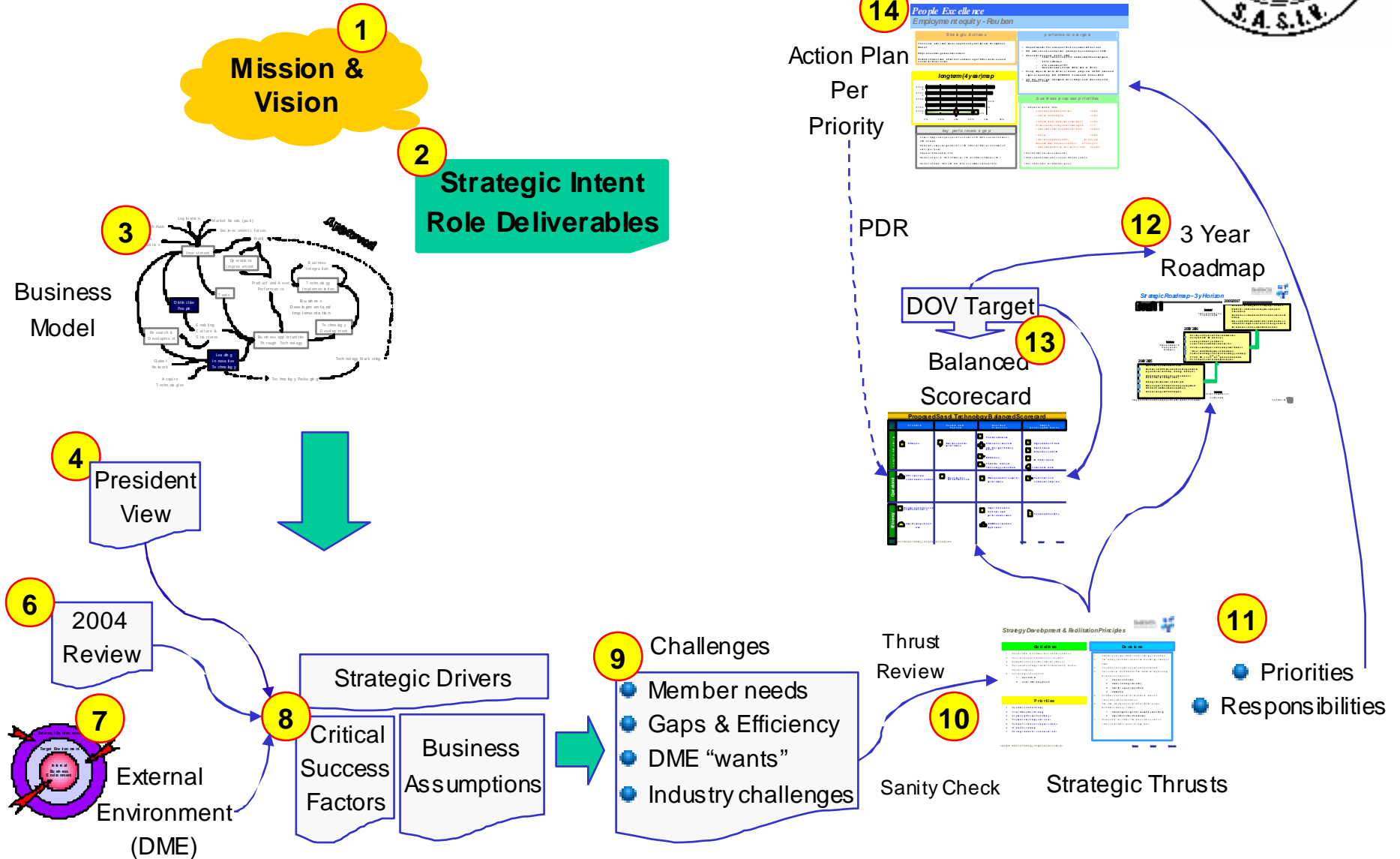
“The world runs on energy. Our coal business is about safe, responsible energy. In a period of world focus on energy security and a healthy planet, coal will come to the party!”



Agenda and Strategy Process

The Strategy Processes

SACEA Strategy Review



Agenda



Wednesday

*Environment
analysis
2005 Review
President Views
DME Wants*

Thursday

*Vision
Purpose
Strategic Intent
Thrust Review
Priorities
3 Year Roadmap*

Wrap-up

*Strategy
Document
Completion
Responsibilities
Council Meeting*



Opening

Objectives of Strategy Workshop



- ◆ *ECSCA registration – have to register all this year*
 - *All SACEA members registered*
- ◆ *Clarification of all new roles and accountabilities*
- ◆ *SACEA viewpoint on training*
- ◆ *Involvement of schools in Coal Mining*
- ◆ *Continual training necessary for practicing engineer – structure events along those lines*
- ◆ *Threat of participation in SACEA events – support from mining housesfocussed events*
 - *Credit system in terms of ECSCA*
- ◆ *Engineering profile*
- ◆ *Changes in legislation that will affect us – approach towards members to stay abreast*
- ◆ *Membership of DME inspectors?*
- ◆ *SACEA involvement in safety challenge*

President's welcome



- ◆ *Together we will develop the vision*
- ◆ *We have some good challenges*
 - *New DME*
 - *Safety Milestones*
 - *ECSA registration*
- ◆ *We have been successful in 2005, lets make certain we have the same focus and success in 2006!*

SACEA Matchbox Figures

What SACEA represent



◆ People

- Directly employed: 47 000
 - Support 500 000 citizen lives (family and related jobs)
- Indirectly: ~200 000

◆ Assets

- 8 Mining Houses and smaller operators
- 43 Mines, in 4 Provinces

◆ Financials

- Total Turnover: R27bn
- Asset base value: ~R100bn?
- GDP contribution: ?, TAX contribution: ?
- Labour bill: R5.5bn
- Fixed Investment: 25% of asset base

◆ Safety

- 0.04 fatalities per 200 000 man hours (every 10 days a fatality occurs)
- 0.36 loss time injury frequency rate (LTIFR) per 200 000 man hours

SACEA Matchbox Figures

What SACEA represent



◆ Products

- Coal mined per annum: 238million ton pa RSA (90% SACEA)
- Coal exported: 70 million ton
- Sasol market: 40 million ton; Eskom market: 100 million ton; Industrial Sector: 7 million ton; Metallurgical Sector: 6 million ton; merchants: 6 million ton
- If RSA had to import ~ 160 mTon at \$48 it would have costed RSA = R44bn FOB
- We accept and acknowledge our responsible towards sustainable development

◆ Contribution

- We supply coal for 68% of RSA electricity production from Mpumalanga
- We supply coal for 90% of RSA electricity production
- We supply 37% of RSA liquid fuel supply via coal gasification

◆ Social Responsibility

- Medical contribution: R3500 per employee per month = R1.76bn pa
- HIV/AIDS contribution pa: R50m pa
- 1% of turnover towards social upliftment pa ~ R270m

SACEA Matchbox Figures

What SACEA represent



◆ Engineering Cost

- 65% of all cash cost is managed by Engineers
- 90% of all projects are managed by Engineers

◆ Methodology

- Coal is primarily mechanized mining in RSA (done by machines)
- Engineers ensure machines are reliable and available
 - Normally 85% of available production time ensured

◆ Training and Development

- Spend 1 ~ 2% of labour bill on training: R40m pa? (+200 artisans pa)
- We think the Coal Mining industry spend more than any other industry in RSA on technician and artisan training

◆ Coal Technology

- ~ 150 continuous miners in RSA @ R18m per unit
- ~ 400 shuttle cars in RSA @ R4m per unit
- ~ 50 Battery haulers in RSA @ R3m per unit
- ~ 30 draglines in RSA @ \$75m per unit, avg bucket size 60m³ – 85 m³
- ~ 150 roof bolt machines @ R3m per unit

SACEA Matchbox Figures

What SACEA represent



◆ *Energy utilisation*

- *Coal mining consume 100 MW peak demand*

◆ *Environment*

- *Oil recycled per annum ~ ?*

SACEA Matchbox Figures

What SACEA represent (**Mining Representatives**)



◆ Engineering Profiles

- Members of SACEA ~ 170 (including honouree members and student - 203)
- Total Mining Engineers in Mining ~ 280
 - Ratio per production engineer.....~ 50
3-4 sections, with 1 CM per section
Including Engineering Managers
 - Project Engineers.....~ 60 project Engineers
1 per mine
Some "off mine"37
 - Plant Engineers.....~ 60 Plant Engineers
1 – 2 per mine
 - Open Cast Engineers.....~ 24
 - Engineering in Training.....~ 50
 - Engineers with suppliers.....~ 3
 - Engineers in consulting.....~20 (semi-retired or in technical services)
 - Mining Engineers with DME....~ 6
 - ?Engineers with small mines....~10
 - ?Mining Engineers with suppliers....~?
- Mining Engineers registered with ECSA ~ 60 from 148

Target for 2006 = 230



SACEA in 2006

SACEA 2005 in Review



What went well

- ◆ *Performed on all strategic thrusts*
- ◆ *Council meeting the ECSA requirement for being recognised as a voluntary organisation*
- ◆ *Super Presidential function*
- ◆ *Safety day excellent*
- ◆ *Golf day excellent*
- ◆ *Technical visits went well (3 held)*
- ◆ *Fun part went well*
- ◆ *Non-core technical visit Richards bay went well*
- ◆ *Additional technical visit held*
- ◆ *Increased membership by 32*

What did not go well

- ◆ *Can still improve on DME relationship*
- ◆ *Did not hold the Technical conference*
- ◆ *Registration with ECSA can improve*
- ◆ *Regional meeting attendance can improve*
- ◆ *Plant underground and open cast user groups require attention (attendance)*
- ◆ *Did not hold any examinations preparations workshop*
- ◆ *No interaction with CTC*

SACEA Business Cycle 2006



- ◆ *CoalSafe 2006 – 9 March 06, Regions*
- ◆ *Mine Safety Summit – Next one 2007*
- ◆ *Examination preparation workshop*
 - *May 2006*
 - *October 2006*
- ◆ *Engineering Examinations*
 - *June 2006*
 - *November 2006*
- ◆ *ECSA registration workshop*
 - *Clarification of the future – 24 March*
 - *Mining House specific workshop throughout year*
- ◆ *Strategic planning Sessions*
 - *SACEA – 22 – 23 February*
- ◆ *Presidential Functions:*
 - *SACEA – 1 – 3 Sep*

SACEA Business Cycle 2006



◆ SACEA

- Safety Conference – Oct 06
- Technical Symposium – 20 April
- Golf day – 28 Oct
- Annual joint AMRE and/or SACMA meetings – with SACMA in Nov06

◆ Regional Meetings

- Simon – On Fridays @ site with Golf course (fun in SACEA)
- 3 per annum (alternate with Technical visits)

◆ General Meetings

- At Presidential Function

◆ Technical Visits

- Koos – on Fridays
- Target: 3 visits
 - To be confirmed
 - Drakensberg – Jun, Goodyear Jhb – Early November, Tsikondeni - May

◆ User Group Meetings

- Every 2nd month (Start March)
 - Open cast
 - Underground
 - Plant

◆ Representation on various workgroups

- About 26 workgroups – is this huge nr really necessary?

SACEA Business Cycle 2006



◆ Professional Certificated Engineer Committee Meetings

- 31 March, 12 May, 14 July, 8 Sep, 20 Oct

◆ Committee meetings

■ Committee Management Meeting

- ?-Andre

■ MPA Steering

- 1st Monday of every month

■ OHSPC

- Charl

■ Presidents and Vice-presidents meeting

- Jun, Nov

■ CM and EE

- ? – Simon

■ SAFA

- ?-Henk/Thys

■ SANS (7 committees)

- ?-Henk/Thys

■ L5&6 SGG

- Lampies

- 24/3, 22/4, 19/5, 30/6, 21/7, 25/8, 15/9, 27/10, 17/11

SACEA Business Cycle 2006



◆ Committee Meeting

- MQA
 - ?-Trevor
- SACMA safety Forum
 - ?-Rory
 - 3rd Thursday
- Commission of Examiners
 - 9/3, ?/9
 - Koos
- TRG 26
 - ? – Koos
- CTC
 - ?-Jacob

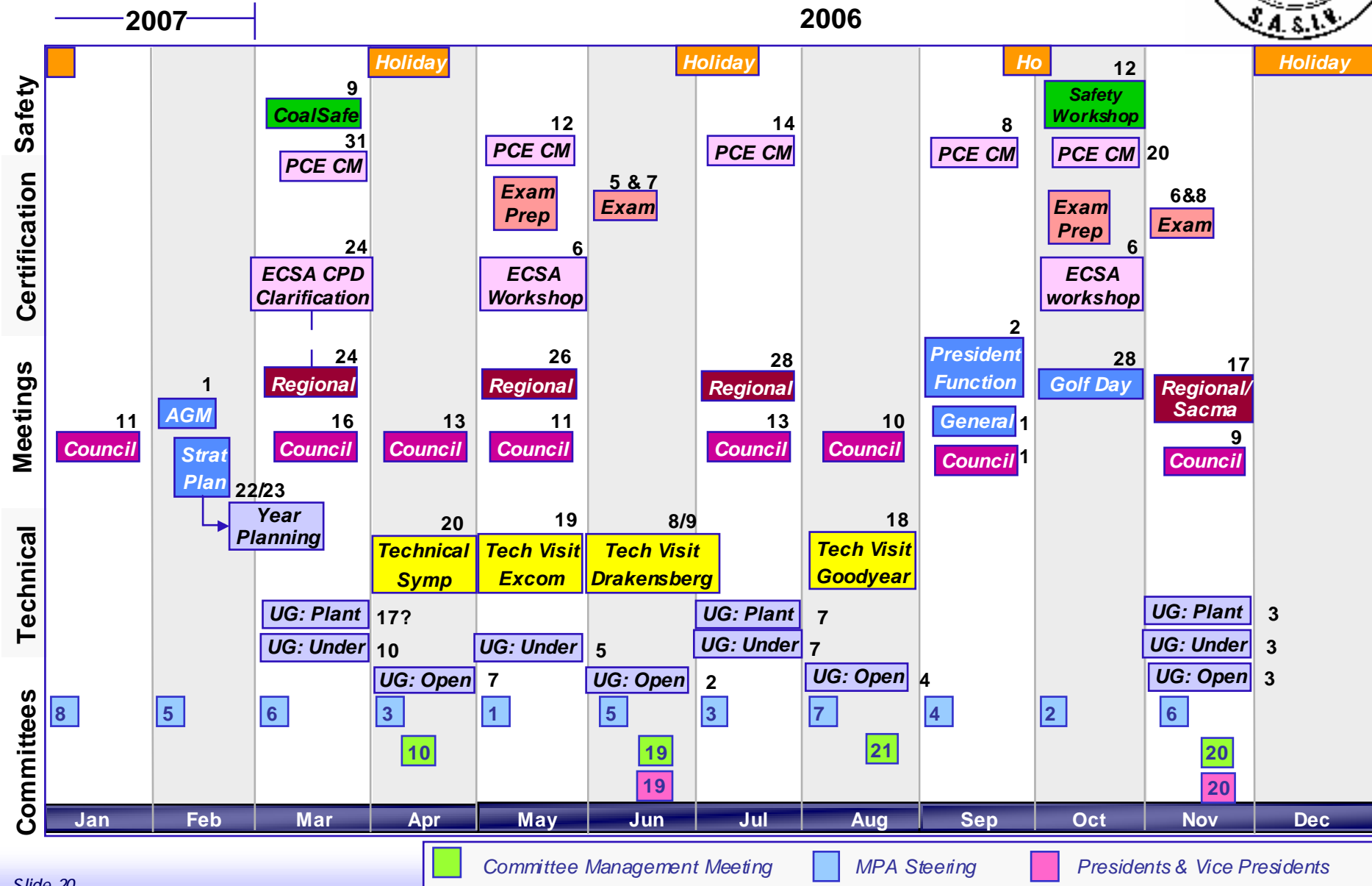
◆ Communication to Heads of Engineering of each Mining House

- David/Schalk
- Between March and April

SACEA Business Cycle

Guidelines

- SACEA Council meetings on 2nd Thursday of the month, 08:00 for 08:30
- if the 2nd Thursday not available, go to 3rd Thursday
- Council always before the Regional meeting





The Radar Screen for 2006 - 2007

Trends in the past 12 months



- û Few exploration licences allocated – will coal mining growth slow down?
- û Revision/conversion of Mining Rights cause slow down in expansionary projects
- û Richardsbay project phase 5 will cause capacity increase in exports
- û Spoornet increased asset base – 110 new locomotives for coal mining
- û Eskom growth plan starting to materialise
- û Possible new CTL plant for Sasol (long term)
- ü Starting to experience skills shortages in RSA
- ü Increased pressure by DME on safety – consequence management by DME
- ü New DME by April 2006 – new relationship to be established
- ü “Green Scorpions” established
- ü Increased road transport of coal – negative road infrastructure consequence (*David take to SACMA strategy session*)
- û Tough to get mine closure certification
- ü kW limitation more stringent on mines without certificated Engineer – small mines affected by this....might draw Engineers from Mining Houses

Trends in the past 12 months



ü The past rate of certificated engineers for 2005 only 8%

- 10 passed from 130 entries

ü Drive for professionalism legislated

- Profession project managers
- Professional Engineers
- Professional Certificated Engineers
- Professional Technologists
- Professional Technicians
- Professional Metallurgical Managers

ü New technology introduced

- JNA2
- Wet head
- Collision avoidance
- Data transmission – machine to surface
- Tri-tronics, Ground breaking initiatives

ü Drive for safe making behaviours

ü “Forced” increased involvement and influencing through committees and working groups

ü Workload on line personnel increasing – taking focus out of operations

ü Suppliers driving for overhaul of machinery

ü Cost/ton or/with TCO contracts appearing

ü Slow decision on capital expenditure by customers

ü Cost of business increasing (bearings, tyres, steel)

Trends in the past 12 months



- û Due to the amount of work in RSA the preferred customer is starting to appear
- û Platinum mine 'stealing' of coal mining resources decreased
- û More Mining Engineers migrating to other disciplines

Key Driving Forces: Coal Industry



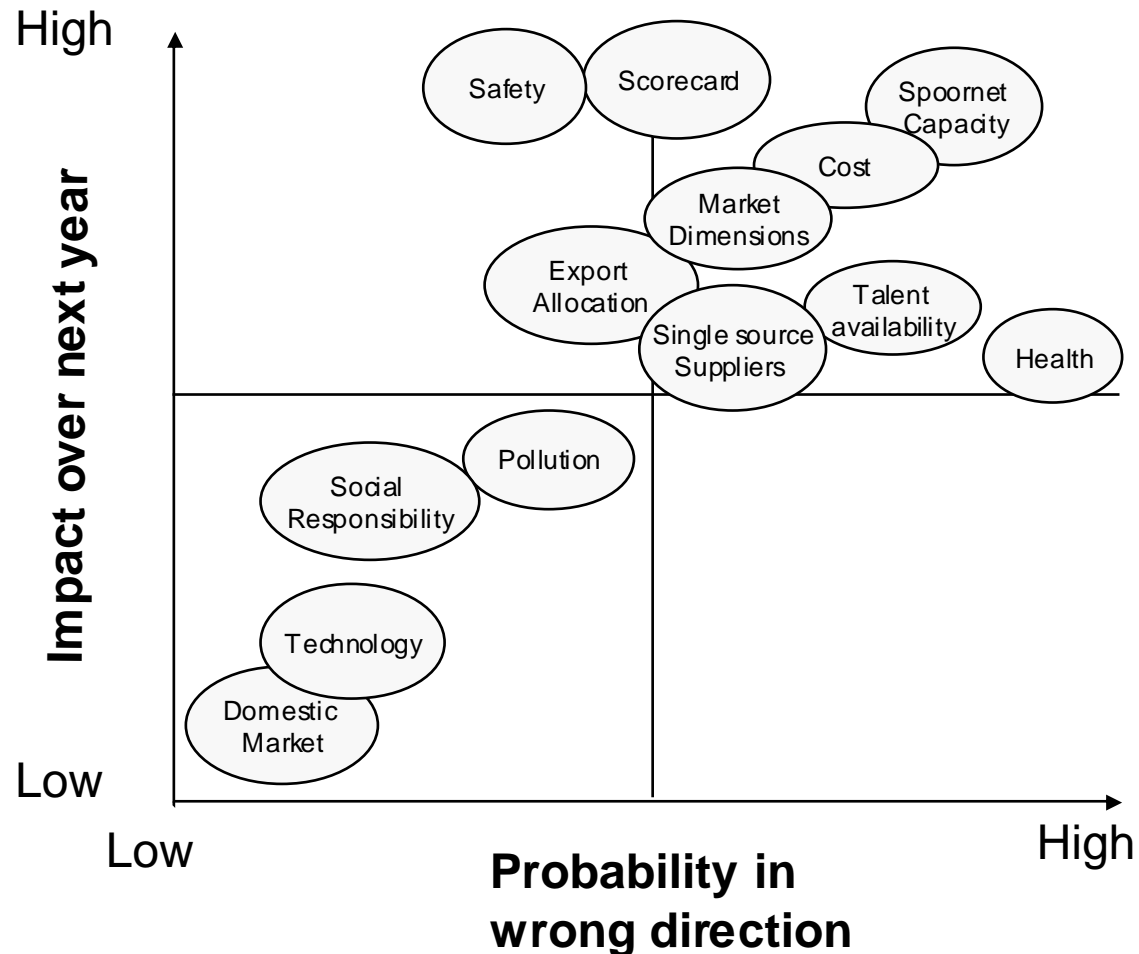
- ◆ Cost to produce a ton of coal at pithead (benchmarking) – Productivity/technology
- ◆ Safety and Employee Health (noise & dust, include aids, community we life in)
- ◆ Environment – water & & air pollution (sustainable development)
- ◆ Social responsibility (stay in business, local economic development, poverty alleviation, skills)
- ◆ Legislation changes and requirements for compliance
 - Scorecard - Equity/Mining charter//Money bill etc
- ◆ Talent pool – availability of talent and development of potential (include education)
- ◆ Market and export allocation through Richardsbay,
- ◆ Domestic market smaller operators
- ◆ Coalink capacity and reliability (include cost)
- ◆ Technology (new) development and (current) operational optimisation (application)
- ◆ The power of single source suppliers
- ◆ Market Dimensions - Demand, R/\$, selling price, Gas to Liquids

The BIG blips on the radar screen: these cause change

Risk Understanding of Key Drivers (2002)



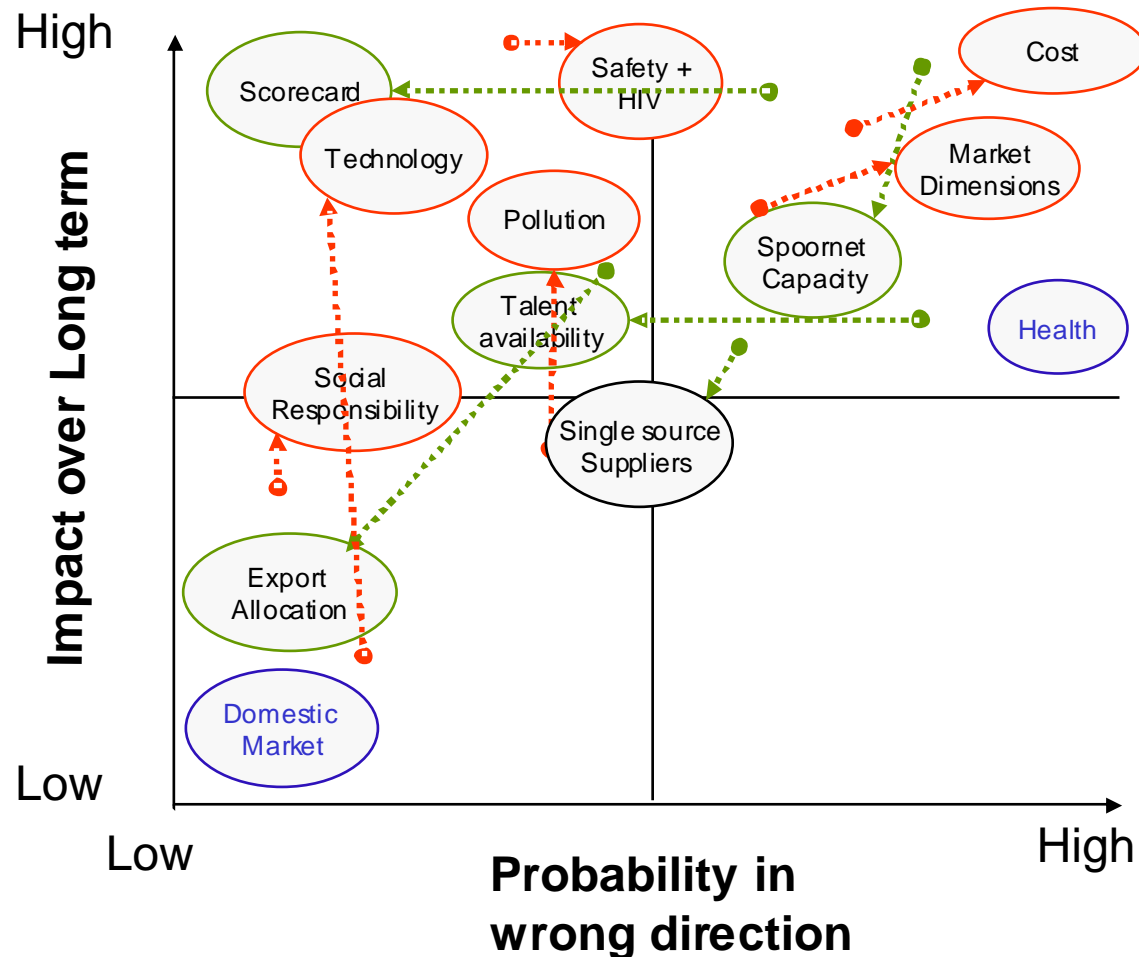
Validate this against CEO's



Risk Understanding of Key Drivers (2003)



Validate this against CEO's

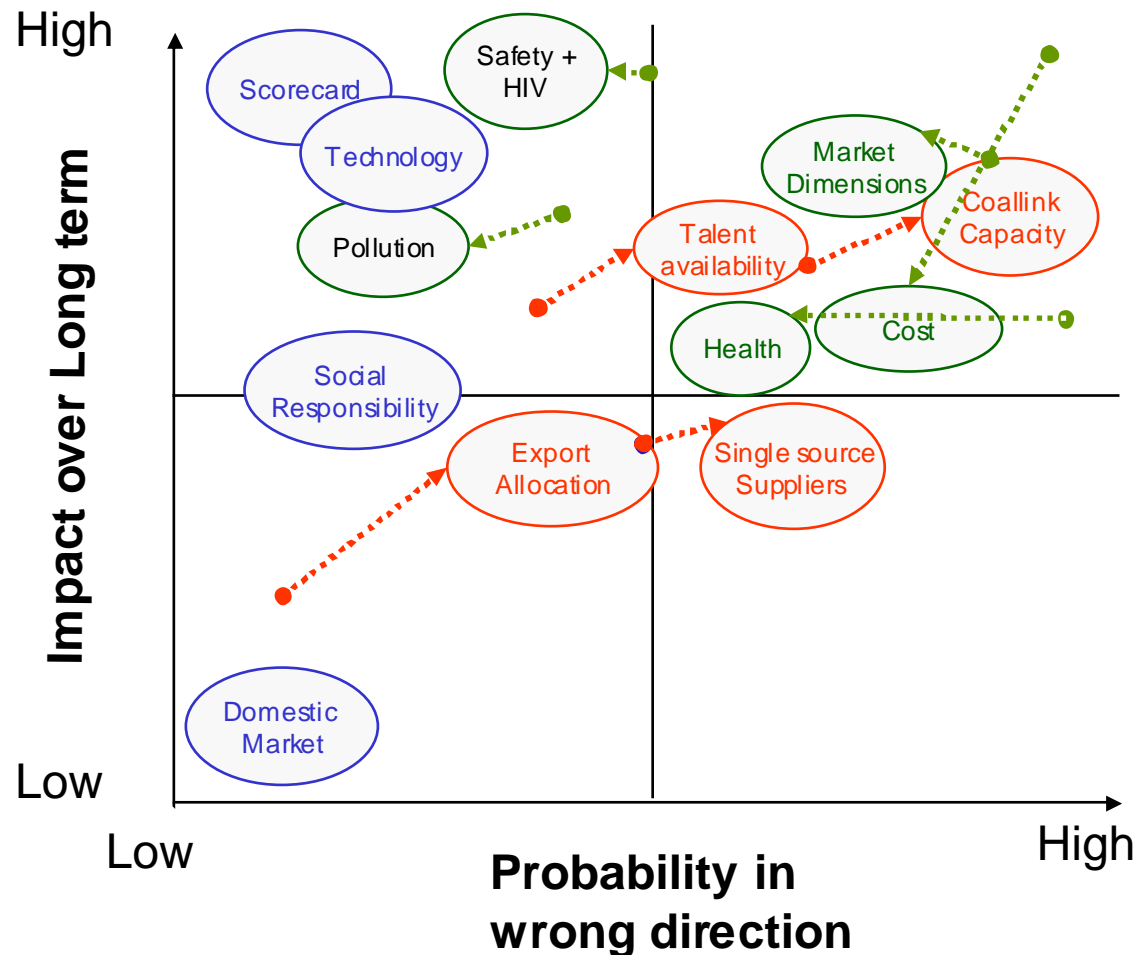


Negative movement
Positive movement
Stay the same

Risk Understanding of Key Drivers (2004)



Validate this against CEO's



Negative movement
Positive movement
Stay the same

Key Driving Forces: SACEA



- **Legislation w.r.t technology and safety issues, labour**
 - ***New governance model for Certificated Engineers***
- **Compliance and improvement of SHERQ standards**
- **Membership value and company value**
 - *Share best practices*
 - *Member Commitment/participation*
 - *Networking*
 - *Marketing and communication*
 - *Having fun*
- **Influence and impact competency standards setting bodies** (SANS, SAFA, MQA, ECSA, MRAC, CTC)
- **Competency of technical and operations personnel w.r.t. machinery/equipment**
- **Influence on technical committees and associations – result in standards** (SACMA, MPA, AMRE)
- **Alignment with goals of Government/DME**
- **Alliances with professional associations** (AMRE, SACMA, ECSA, etc)
- **Council leadership & strategic direction and implementation**
- **Mine and engineering managers involvement and support**
- **Influence the adoption of acceptable technology**
- **Single source/Large suppliers, power to influence price and quality**



Vision and Mission review

Vision



To be a professional, dynamic, value-adding and influential body in our industry

- | | | | |
|---|--------------------|---|--|
| 2 | ✦ Professional | ✦ In behavior, responsible, competent, respected, beyond repute, ethical, | |
| 5 | ✦ Dynamic | ✦ Adaptable, energetic, pro-active, flexible, quest for excellence, challenging | |
| 3 | 4 | ✦ Value-adding | ✦ To member and company, leader, participative, to industry, cost sensitive, innovative, standards settings/influence, best practice |
| 1 | ✦ Influential body | ✦ Respect, acknowledge, change initiators, recognized, consulting, networking | |
| | ✦ Industry | ✦ Coal Mining Industry, related Engineering fields | |

Our sphere of Influence

SACEA members and affiliated associations, Chamber of Mines, Government (incl ECSA, MQA, SACMA), labour force, suppliers, learning institutions and the respective Mining Houses

Mission



- ★ **1.** To empower members through effective interaction and to promote professionalism
- ★ **2.** Acknowledged representing body for members and industry on decision taking forums
- ★ **3.** Influence and lead the technical maturity of the coal mining industry
- ★ **4.** Actively influence the development of safe and practical legislation
- ★ **5.** To uphold SHERQ standards
- ★ **6.** Through competent members, contribute to the bottom-line of the represented Mining Houses
- ★ **7.** Maximum impact in the Coal industry through our association with Professional Associations

Our Accountabilities (Role Deliverables)



1. *Advancement and status of Engineering fraternity in Coal Mining Industry*
2. *Standards setting contribution to:*
 - *legislation w.r.t technology and safety issues*
 - *competency standards setting bodies (MQA, ECSA, MRAC, CTC)*
 - *technical committees and associations – result in standards (SANS, SAFA)*
3. *Compliance to and improvement of SHERQ standards*
4. *To deliver membership value and company value*
 - *Share best practices*
 - *Member Commitment/participation*
 - *Structure for Networking*
 - *Have fun*
5. *Promote active support by Mine and Engineering managers from all Mining Houses*
6. *Ensure competency of technical and operations personnel w.r.t. machinery/equipment*
7. *Ensure the adoption of acceptable technology*
8. *Sound relationship with Government/DME*
9. *Alignment with relevant professional associations*
10. *Provide the vehicle that is the mechanism for social/technical interaction between members*
11. *Facilitate technical discussions between the Coal Engineering fraternity and suppliers*
12. *Continuous development of professional certificated Engineers through validation and monitoring CPD category 1 activities*



Stakeholder Focus



Stakeholder means: somebody who has an investment and/or interest in SACEA, somebody who can influence SACEA, somebody who SACEA want to influence

Priority

- ★ ■ Member
- ★ ■ Mining House
- COM
- ★ ■ Government
 - DME
 - MQA
 - MRAC
 - ECSA
 - SANS
 - SAFA
- CTC
- SACMA
- ★ ■ AMRE
- ★ ■ BMF
- Suppliers: BE, Hitachi, Barlows, Komatsu, GoodYear, VAMT, SASOL, Siemens, JOY
- ★ ■ Relevant Professional Associations

★ Represent a lot of work with high involvement and interaction



Strategic Direction

Strategy Guiding Principles



To achieve our vision:

- ◆ *The Health and Safety of the industry comes first*
- ◆ *Technical excellence is the vehicle to our success*
- ◆ *As members, we abide by the SACEA Code of Ethics*
- ◆ *Success is achieved through win-win partnering*
- ◆ *We recognise the importance of competitiveness, and the benefits of collective learning*
- ◆ *We value member involvement*
- ◆ *People ensure top achieving business*
- ◆ *Enjoy SACEA fellowship*



Strategy Roadmap



Where we want to be

To be a professional, dynamic, value-adding and influential body in our industry

On Track to Achieve this!!



Achieving the SACEA Vision

ü Summary of value added done



Achieve added value to all stakeholders

ü



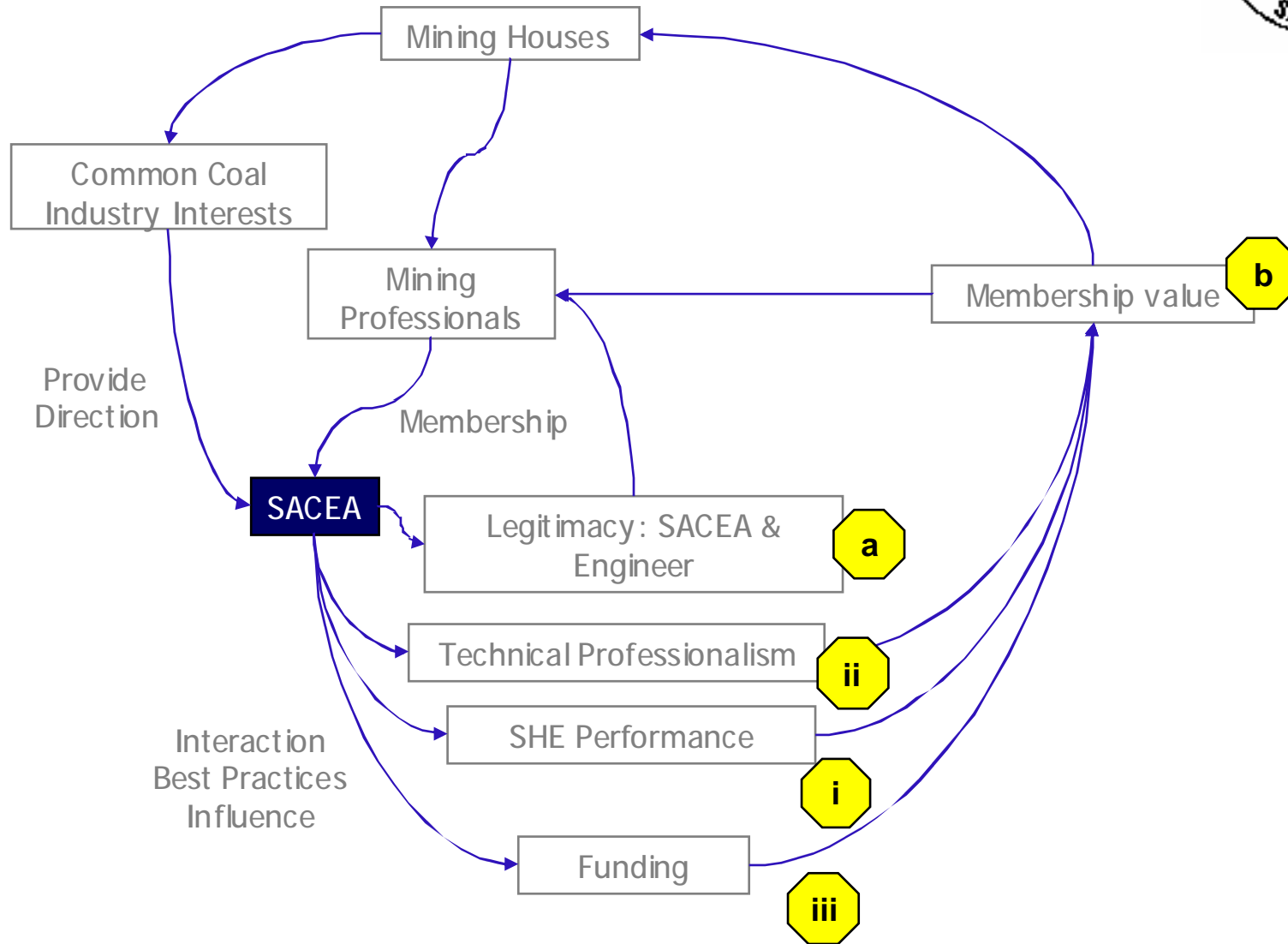
Achieving Membership value

Where we are

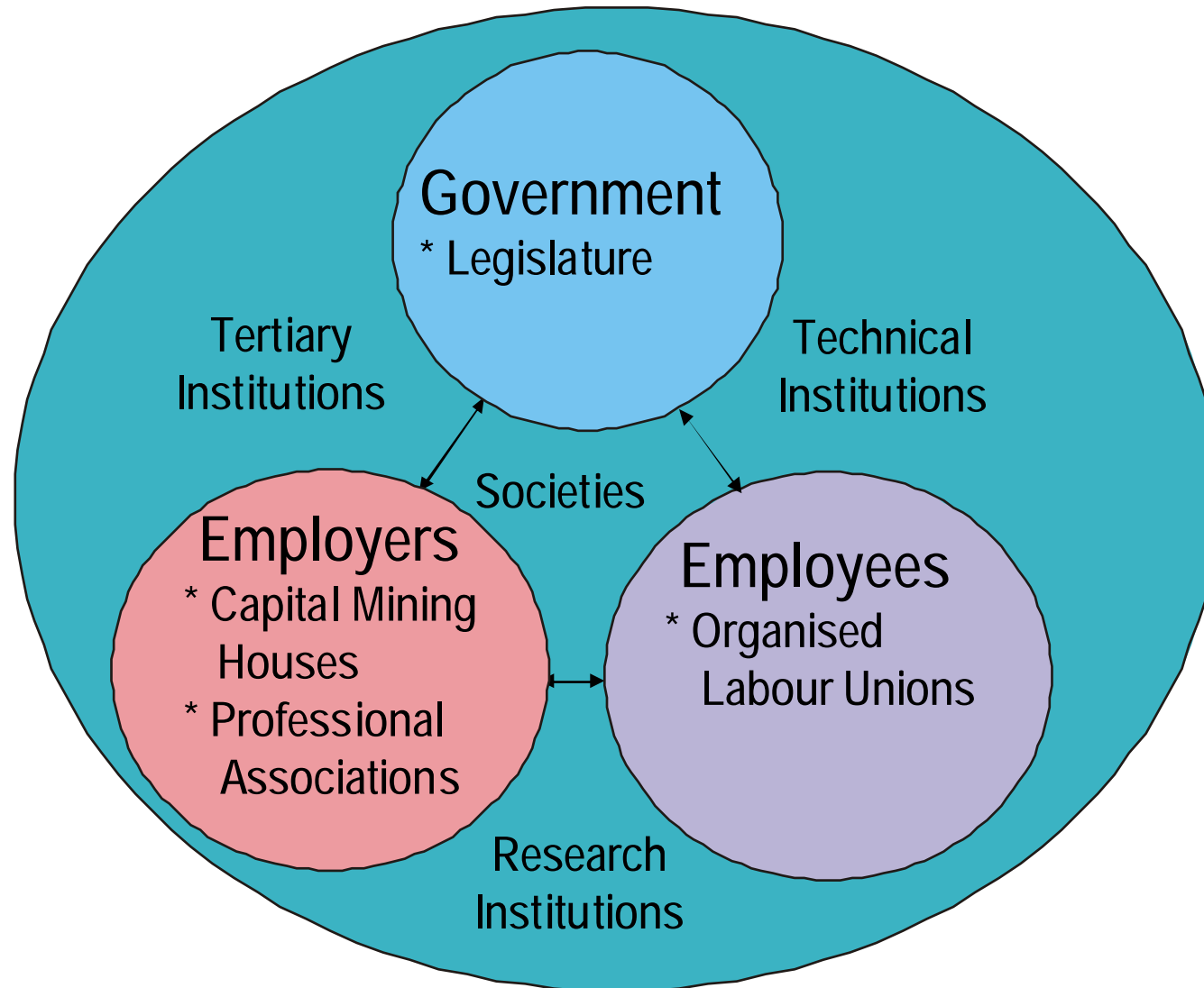


SACEA “Business” Models

“Business” Model

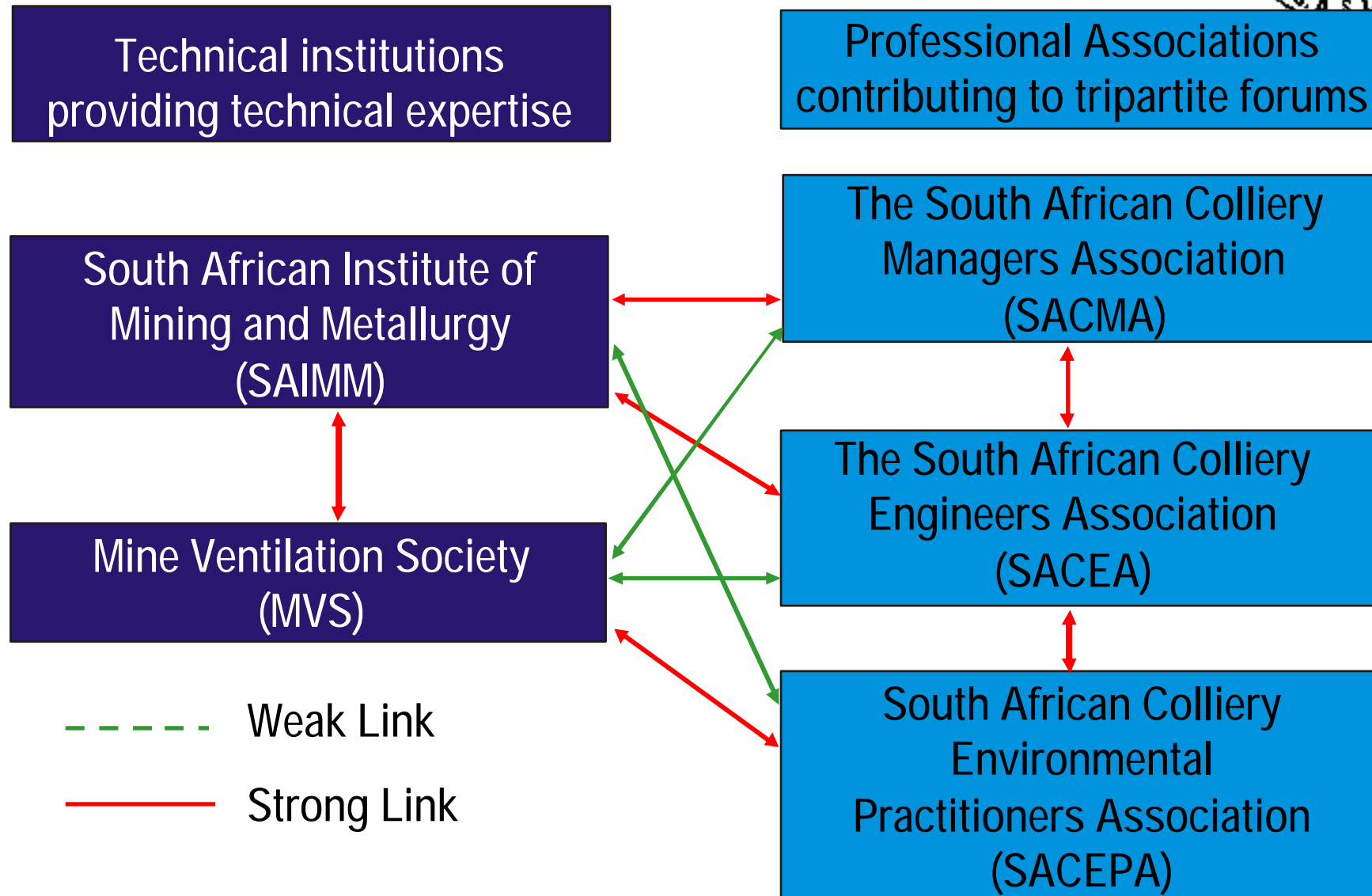


A New South African Work Ethic



3 Core groupings in a "sea" of others

Current Coal Industry Reality





Strategic Focus Area review

Value Add of SACEA in 2005



- ◆ **Legitimacy of SACEA and the Certificated Engineer (ECSA)**
 - Model accepted for qualification of Certificated Engineer
 - Profile of Engineer completed and accepted
 - SACEA recognised as a voluntary association with ECSA
 - Participation in various working Groups
 - CloM bought into SACEA view of the Mandatory appointment
- ◆ **Membership value (link to engineering manager)**
 - Heads of Engineering and Engineering Managers committed to SACEA with improved support
 - Membership grown from 170 to 203
- ◆ **SHE performance (align with DME)**
 - Good Safety Workshop, well attended
 - Participated in CoalSafe
 - Newsflash working and adding value (technical perspective)
 - Evaluation of accidents continued with proposals to improve on safety
 - Making progress on Contractor Generic Induction process with industry wide accepted certificate of fitness
- ◆ **Technical Professionalism (people, equipment, association)**
 - Successful technical visits and regional meetings (good technical content, attendance can be improved on)
 - Prepared for the first Technical Symposium in April 2006
- ◆ **Funding**
 - Success in fund raising now allow us to bring more to the member – will reduce burden on the companies

Strategic Focus Areas – 2006

Remains in tact



From “2005 - Reposition for value” to “2006 – Delivering Value

SFA 1: 2006 Priorities

(Champion: Trevor)



Legitimacy of SACEA and the Certificated Engineer

2006

- **The Future of the Certificated Engineer (Trevor/Charl)**
 - Solve issues around registration and Licensing with ECSA/MQA/DME (continue)
 - Maintain mandatory appointment of certificated engineers w.r.t. MH&SA (continue)
 - Reach conclusion on the entry level for NQF (L6 vs L7)
- ✦ **The legitimacy of SACEA (Lampies, Ephraim)**
 - Achieve registration of 75% of SACEA members as professional Certificated Engineers by Dec 06
 - 100% SACEA council members registered as professional Certificated Engineers by Jul 06
 - Achieve membership of 230:
 - Sasol review quota on the basis of ECSA requirements
 - From Kumba and Small Mining Operators (use technical visits to Tsikondeni as launch pad, road show by president)
 - Approach DME to rethink membership decision
 - Invite Examiner to address regional meetings – student members
 - From Students (through involvement in Training Centres and through Mentors and Coaches)
- ✦ **Improved interaction with the CloM and Principle Inspectors at Head Office and Region (David)**
 - Introduce SACEA, its strategy and focus areas via formal appointment by May06 (Excom)
 - Influence the CloM for completion of the Mine Health and Safety Act regulations – even offer member help to complete this
 - Align with the objectives of the CloM and Principle Inspectors (sharing of strategies)
 - 3 progress meetings per annum with Principle Inspectors with a specific agenda
 - Interaction regarding CoP's, guidelines
 - Exchange of newsletters (SACEA's send to DME by Simon)
 - Communication on directives
 - Request Principle Inspector at HQ to present a paper at SACEA Safety Workshop – focus on machinery

SFA 1: 2006 Priorities

(Champion: Trevor)



Legitimacy of SACEA and the Certificated Engineer

2006

◆ **Communication with Heads of Engineering per Mining House (David)**

- Present SACEA strategy plan progress (short)....
 - Do this via a single, network meeting of HoE by 30 April 06
 - Focus on ECSA registration and NQF
 - Focus on credits for CPD
- Continue: Circulate news flash to them
- Invite to Presidential Function

■ **Continuous development of professional certificated Engineers through validation and monitoring CPD category 1 activities (Lampies, Ephraim)**

- Working Group under NPA will develop the rules (Lampies)
- Develop a control system for allocating, storing and administering CPD credits
 - Must be auditable
- Establish SACEA validation committee
 - Chair: Lampies
 - Members: Schalk, Andre, Johannes, Rory, Kumba?, Jacob
 - Evaluate presentations for credits allocation
- Ensure the Technical Symposium is approved for CPD credits
 - Deadline for communication: Friday 10 March 2006...include allocation of credit
 - Date: 20 April

Entry level for NQF

SACEA Proposal and Hymn sheet



Proposal

- *It should be a Level 7 qualification (BTech)*
 - *With the understand that a Diploma + 2 years EIT Engineering training + GCC upgrade the Level 6 qualification to Level 7*

Rationale

- *For international recognition, you need to be on Level 7*
- *A person with a Diploma, can write GCC and thereby achieve Level 7 status*
- *According the ECSA analysis, Mining Engineers & Managers work in a “Broadly defined” environment, this correspond to a NQF Level 7 qualification*

Consequence if Level 6

- *Will not achieve qualification for international work*

CloM Involvement in SACEA

Rethink DME ruling



Proposal

- *The DME should recall earlier decisions to allow for this – via affiliated membership*
 - *Attendance of the Presidential function may not be sponsored*

Rationale

- *The Principle inspector has monthly meetings with Labour Organisations - In a similar manner, for balance, meetings should be held with SACEA and Engineers*
- *To ensure broad based industry input into developments (new regulations, codes of practices, guidelines, directives)*
- *SACEA can be a Technical soundboard to Government*

Consequence if this doesn't happen

- *Legislation can be enforced with which the Mining fraternity are not in agreement*
- *More difficult acceptance on buy-in*

SACEA contribution to ECSA Continuous Professional Development

Must get minimum of 3 credits per year, with 25 over 5 years
(Must be from at least 2 categories, with 1 from Cat1)



◆ **Category 1: Development Activities** (Validated via SACEA committee)

- Allocation guideline: 1 credit per 10 hours
 - **Max 4 credits, Min 1 credit**
- From Conferences , congresses, large group workshops, lectures, seminars, refresher courses, colloquiums
- Thus: Technical Symposium + Safety Conference = 1.2 credits

◆ **Category 2: Work Based Activities** (Validated by individual)

- Allocation guideline: 1 credit for every 400 hours engineering work
 - **Max 2 credits per annum**
- Allocation guideline: 1 credit for every 50 hours of mentoring
 - **Max 1 credit**

◆ **Category 3: Individual Activities**

- Allocation guideline: 1 credit for membership of voluntary Association
 - **Max 1 credits per annum**
- **Max of 3 credits from**
 - From Technical articles – 1 credit per article published,
 - From Papers presented at conferences, congresses/poster presentation – 1 credit per
 - From participation in statutory, professional, institutional, technical, non-technical committees or task groups – 1 credit per 10 hours active participation
 - From ECSA registration committees - 1 credit per 10 hours active participation
 - Self study from journals, computerised material, electronic - 1 credit per 10 hours -active must be proofed

SACEA Membership Guarantee through active participation – 2 points from Cat1, 3 from Cat 3

SFA 2: 2006 Priorities

(Champion: Louis)



Membership value (Past President)

2006

☼ Council Meetings

- Council members to compile a one page feedback if meetings can't be attended
- Reminder to council members on week before meeting for one pager feedback if not attending the meeting (Simon)
- Commitment to attendance – use the ECSA credit strategy
- Agenda – Safety, Minutes, Financial, Strategic Thrusts

☼ AGM

- Introduce “class and reputation” in the AGM
- Develop a budget for the AGM...Ideal - should be funded through fund raising events...at a singular venue....
- Medal for “Best paper of the Year” – move to gold certificate, introduce silver medal, Mining House sponsorship for Gold Medal
- Summarise safety achievements for inclusion in documentation
- Include Strategic Focus Area summaries in documentation

☼ Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)

- Discuss support for Council member attendance of meetings
- Discuss support for members to attend meetings/workgroups
- In the newflash, include % attendance of meetings (Regional & User Group) by Mining Houses (Simon)
- Participation of junior and new members - Projects leading to presentations by Junior Engineers
- Experiential training for private and non-bursary candidates using MQA funds
- Value of SACEA with regards to ECSA credits

☼ “Formalise” a SACEA Mine representative on all mines (Mining House Representatives)

- This should be done through the Engineering Managers

☼ Communication with Heads of Engineering per Mining House (David, Simon)

- Develop and circulate Presidents News Letter, etc

☼ Website updates, capacity and usage (Mark, Edward Hagermeyer?, Gert dP?)

- Timeous publishing of material – same day publication
- Link from Mining House Intranets to COM SACEA website (Mining House Representatives)

SFA 3: 2006 Priorities

(Champion: Schalk)



SHE performance (Vice President)

2006

- ◆ *Arrange the SACEA Safety workshop – a must go for all in the industry! (Louis, Rory)*
- ◆ *Partnership in CoalSafe (Andre)*
- ◆ *Involvement with SACMA Safety Forum (Rory, Johannes)*
- ◆ *Standardisation of (Johannes)*
 - *CoP's, SoP's coordination between Mining Houses (Johannes)*
 - *Contractor Safety (with SACAFMA) (Lampies)*
 - *Common accepted generic induction framework between Mining Houses (uplift the standard)*
- ◆ *Setting national standards for safety (Thys)*
 - *Committee participation – (SANS, SAFA) (Thys, Henk)*
 - *Committee participation - OH&SPC (Charl)*
 - *Feedback to Council, Mandate from Council*
- ◆ *Review accidents and incidents for Council meetings (Schalk)*
 - *Collect information before meetings and make recommendations at the meeting*
 - *Analyse incidents for root causes and learning points*
 - *Reflect on Safety achievement against Mining Industry Targets and Milestones agreed with the DME*
 - *Liaise with the DME*
 - *Present at regional meetings*
 - *Communication by News flash to members and Heads of Engineering*
 - *Collate information on safety achievements and make visible via Newsflash & Website*

SFA 4: 2006 Priorities

(Champion: Schalk)



Technical Professionalism (Regional Chairman)

2006

■ Development & Training (Andre/Koos)

- Involvement on commission of examiners (Koos)
- Training and development of engineering employees through-out the ranks, grow our pool of candidates (Andre – champion of all training related issues)
 - Continued involvement with CTC, Ingwe, Sasol, AngloCoal, i-Campus (Jacob)
 - Preparation of candidates for certificate of competency – invite junior engineers to regional meetings
Involvement with AMRE on preparation workshops (Andre)
 - Sensitise and ensure institutions obtain validation of CPD Cat 1 activities by SACEA (Mining House Representatives)
- Explosion Protected Apparatus (EPA) training (Henk)
 - Active participation with all the stakeholders (SAFA, DME, Training Houses, etc)

⊗ Interact with service providers

- User Groups use Service Providers as venues for meetings – ensure interaction and alignment (Mark, Thys, Guy)
- Attend the CM&EE meetings on a regular basis (David, Schalk, Charl)
- Identify the collective risk to the coal mining industry w.r.t. electricity supply (Henk)

⊗ Regional meetings and user sub-committees (Regional Chairman-Koos)

- Focus on the issues form the collective engineering challenges in coal mining (next slide)
- Support User Group Forums Chairpersons (Schalk)
- Directing of the User Groups (Koos, Ephraim)
 - Underground – Mark
 - Plant – Thys
 - Open cast - Guy

■ Technical Visits and symposium (Schalk, Koos)

- Arrange 3 technical visits per annum (Koos, Lampies)
- Arrange technical symposium (Schalk, Andre)

⊗ Involvement in Secondary schooling sector (Ephraim, Jacob)

- Establish a sub-committee that will develop a strategy/plan to attract learners to Coal Mining across all job levels (Jointly with SACMA and MPAs in Coal Mining Industry)
 - Mine visits
 - Take learners on Technical Visits
 - Idea: Coal Mining Open day for schools...or join Tertiary Institutions in their Open Days, etc

Key engineering challenges in Coal Mining at the moment (06)



◆ **Environmental**

- Re-use/recycling of oil
- “Green Scorprions” requirements, awareness, focus, OHASH 18000, etc

◆ **New technology introduced**

- JNA2
- Wet head
- Collision avoidance
- Data transmission – machine to surface
- Tri-tronics, Ground breaking initiatives

◆ **Maintenance cost:**

- Cost trends – Tyres, Steel, bearings, conveyer belting
- Availability of spares for mining machinery
- Maintenance techniques - condition monitoring

◆ **Equipment performance**

- Reliability of machines (JOY CM)

◆ **Training**

- Consistency between training institutions (specifically pertaining to unit standards, moderation thereof, are the mechanisms in place)
- Appropriateness of CTC training for today’s technology

◆ **Introduction of new technology at a premium**

- JNA II.....new upgrades & capability! (cost and reliability)
- Control technology

◆ **Short comings in technology**

- Communication systems (telemetry), ability to handle the volume of data, upgrading
 - E.g. Long conveyer systems
- Design of equipment to enhance safety, health and ergonomics

◆ **Legitimacy of the Engineer**

- kW limitation more stringent on mines without certificated Engineer

SFA 5: 2006 Priorities

(Champion: Faizil)



Funding & Fun

2006

■ Annual Membership Fees

- SACEA/ECOSA strategy as vehicle to attract more members (*Mining House Representatives*)
- Secretariat asked to do invoices electronically to Mining House representatives (*Simon*)
- Formal credit allocation only allocated upon payment of membership fees (*Simon*)

■ Financial Management

- Agenda point on council meetings – spend time on it! Minimum 30 minutes on meeting (*David, Simon*)
 - Outstanding memberships fees
 - Outstanding invoices for activities (Golf day, Safety Workshop, Presidential Function, Technical visits, Technical Symposium, CoalSafe)
 - Authorisations for payments
 - Variances and forecast
 - Expenditure on consultants
- Continuous follow-up by Mining House representatives on Council on out-standing debt
 - Xstrata - Johannes
 - Ingwe - Trevor
 - Anglo - Jacob
 - Sasol – Charl/Andre
 - Total - Lampies
 - Kumba - Lampies
 - Eyeziwe - Faizil
 - SMO - David

■ Fun in SACEA

- Annual Golf Day.....Winner of day, competition between associations, competition between suppliers (*Louis*)
- Presidential Function Golf day.....Competition between Mining Houses...non-golfer participation, requirements from the President (*Koos, Louis*)
- Golf at Regional Meetings (*Koos*)
- Presidential Function (*David, Simon*)
- Technical visit in Drakensberg/Lesotho Highlands Scheme and Goodyear Jhb (*Koos, Lampies*)

■ Other sources of revenue (addressed in other SFA's)

- Technical Symposium (*Schalk*)
- Safety Workshop (*Louis*)



Strategic Focus Area review

Task list per Council Member

SFA Task Allocation

Council Members



David (Page 1)

President

❁ **Improved interaction with the CloM and Principle Inspectors at Head Office and Region (David)**

- Introduce SACEA, its strategy and focus areas via formal appointment by May06 (Excom)
- Influence the CloM for completion of the Mine Health and Safety Act regulations – even offer member help to complete this
- Align with the objectives of the CloM and Principle Inspectors (sharing of strategies)
- 3 progress meetings per annum with Principle Inspectors with a specific agenda
 - Interaction regarding CoP's, guidelines
 - Exchange of newsletters (SACEA's send to DME by Simon)
 - Communication on directives
- Request Principle Inspector at HQ to present a paper at SACEA Safety Workshop – focus on machinery

❁ **Communication with Heads of Engineering per Mining House (David)**

- Present SACEA strategy plan progress (short)....
 - Do this via a single, network meeting of HoE by 30 April 06
 - Focus on ECSA registration and NQF
 - Focus on credits for CPD

■ Continue: Circulate news flash to them

SFA Task Allocation

Council Members



David (Page 2)

President

◆ Council Meetings

- Council members to compile a one page feedback if meetings can't be attended
- Agenda – Safety, Minutes, Financial, Strategic Thrusts
- Agenda – Safety, Minutes, Financial, Strategic Thrusts

◆ AGM

- Introduce “class and reputation” in the AGM
- Develop a budget for the AGM...Ideal - should be funded through fund raising events...at a singular venue....
- Medal for “Best paper of the Year” – move to gold certificate, introduce silver medal, Mining House sponsorship for Gold Medal
- Summarise safety achievements for inclusion in documentation
- Include Strategic Focus Area summaries in documentation

◆ Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)

- Discuss support for Council member attendance of meetings
- Discuss support for members to attend meetings/workgroups
- In the newflash, include % attendance of meetings (Regional & User Group) by Mining Houses (Simon)
- Participation of junior and new members - Projects leading to presentations by Junior Engineers
- Experiential training for private and non-bursary candidates using MQA funds
- Value of SACEA with regards to ECSA credits

◆ Communication with Heads of Engineering per Mining House (David, Simon)

- Develop and circulate Presidents News Letter, etc

SFA Task Allocation

Council Members



David (Page 3)

President

■ Financial Management

- Agenda point on council meetings – spend time on it! Minimum 30 minutes on meeting (*David, Simon*)
 - Outstanding memberships fees
 - Outstanding invoices for activities (Golf day, Safety Workshop, Presidential Function, Technical visits, Technical Symposium, CoalSafe)
 - Authorisations for payments
 - Variances and forecast
 - Expenditure on consultants

■ Fun in SACEA

- Presidential Function (*David, Simon*)

⊗ Interact with service providers

- Attend the CM&EE meetings on a regular basis (*David, Schalk, Charl*)

SFA Task Allocation

Council Members



Lampies

Page 1

• **The legitimacy of SACEA (Lampies, Ephraim)**

- Achieve registration of 75% of SACEA members as professional Certificated Engineers by Dec 06
- 100% SACEA council members registered as professional Certificated Engineers by Jul 06
- Achieve membership of 230:
 - Sasol review quota on the basis of ECSA requirements
 - From Kumba and Small Mining Operators (use technical visits to Tsikondeni as launch pad, road show by president)
 - Approach DME to rethink membership decision
 - Invite Examiner to address regional meetings – student members
 - From Students (through involvement in Training Centres and through Mentors and Coaches)

■ **Continuous development of professional certificated Engineers through validation and monitoring CPD category 1 activities (Lampies, Ephraim)**

- Working Group under NPA will develop the rules (Lampies)
- Develop a control system for allocating, storing and administering CPD credits
 - Must be auditable
- Establish SACEA validation committee
 - Chair: Lampies
 - Members: Schalk, Andre, Johannes, Rory, Kumba?, Jacob
 - Evaluate presentations for credits allocation
- Ensure the Technical Symposium is approved for CPD credits
 - Deadline for communication: Friday 10 March 2006...include allocation of credit
 - Date: 20 April

SFA Task Allocation

Council Members



Lampies

Page 2

- **Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)**
 - Discuss support for Council member attendance of meetings
 - Discuss support for members to attend meetings/workgroups
 - In the newflash, include % attendance of meetings (Regional & User Group) by Mining Houses (Simon)
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 - Experiential training for private and non-bursary candidates using MQA funds
 - Value of SACEA with regards to ECSA credits
- **Contractor Safety (with SACAFMA) (Lampies)**
 - ✦ Common accepted generic induction framework between Mining Houses (uplift the standard)
- **Fun in SACEA**
 - Technical visit in Drakensberg/Lesotho Highlands Scheme and Goodyear Jhb (Koos, Lampies)
- **Technical Visits and symposium (Schalk, Koos)**
 - ✦ Arrange 3 technical visits per annum (Koos, Lampies)

SFA Task Allocation

Council Members



Trevor

Page 1

Champion: SFA1

*Legitimacy of SACEA
and the Certificated
Engineer*

- ***The Future of the Certificated Engineer (Trevor/Charl)***
 - *Solve issues around registration and Licensing with ECSA/MQA/DME (continue)*
 - *Maintain mandatory appointment of certificated engineers w.r.t. MH&SA (continue)*
 - *Reach conclusion on the entry level for NQF (L6 vs L7)*

SFA Task Allocation

Council Members



Louis

Page 1

Champion: SFA2

Membership value
(Immediate past
President)

- ◆ *Arrange the SACEA Safety workshop – a must go for all in the industry! (Louis, Rory)*
- *Fun in SACEA*
 - *Annual Golf Day.....Winner of day, competition between associations, competition between suppliers (Louis)*
 - *Presidential Function Golf day.....Competition between Mining Houses...non-golfer participation, requirements from the President (Koos, Louis)*
- *Other sources of revenue (addressed in other SFA's)*
 - *Safety Workshop (Louis)*

SFA Task Allocation

Council Members



Schalk

Regional Chairman

Champion: SFA3

SHE performance (Vice President)

Champion: SFA4

Technical

Professionalism
(Regional Chairman)

- ◆ **Review accidents and incidents for Council meetings (Schalk)**
 - Collect information before meetings and make recommendations at the meeting
 - Analyse incidents for root causes and learning points
 - Reflect on Safety achievement against Mining Industry Targets and Milestones agreed with the DME
 - Liaise with the DME
 - Present at regional meetings
 - Communication by News flash to members and Heads of Engineering
 - **Collate information on safety achievements and make visible via Newsflash & Website**
- Other sources of revenue (addressed in other SFA's)
 - Technical Symposium (Schalk)
- ◆ **Regional meetings and user sub-committees (Regional Chairman-Koos)**
 - Support User Group Forums Chairpersons (Schalk)
 - Technical Visits and symposium (Schalk, Koos)
 - Arrange technical symposium (Schalk, Andre)
- ◆ **Interact with service providers**
 - Attend the CM&EE meetings on a regular basis (David, Schalk, Charl)

SFA Task Allocation

Council Members



Faizil

Page 1

Champion: SFA5

Funding

- **Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)**
 - Discuss support for Council member attendance of meetings
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 - In the newflash, include % attendance of meetings (Regional & User Group) by Mining Houses (Simon)
 - Participation of junior and new members - Projects leading to presentations by Junior Engineers
 - Experiential training for private and non-bursary candidates using MQA funds
 - Value of SACEA with regards to ECSA credits

SFA Task Allocation

Council Members



Charl

Page 1

- **Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)**
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 - Value of SACEA with regards to ECSA credits
- **Committee participation - OH&SPC (Charl)**
- **Interact with service providers**
 - Attend the CM&EE meetings on a regular basis (David, Schalk, Charl)

SFA Task Allocation

Council Members



Mark

Page 1

- Website updates, capacity and usage (*Mark, Edward Hagermeyer?, Gert dP?*)
 - Timeous publishing of material – same day publication
 - Link from Mining House Intranets to COM SACEA website (*Mining House Representatives*)
- Interact with service providers
 - User Groups use Service Providers as venues for meetings – ensure interaction and alignment (*Mark, Thys, Guy*)

SFA Task Allocation

Council Members



Andre

Page 1

- ◆ **Partnership in CoalSafe (Andre)**
- **Development & Training (Andre/Koos)**
 - Involvement on commission of examiners (Koos)
 - Training and development of engineering employees through-out the ranks, grow our pool of candidates (Andre – champion of all training related issues)
 - Continued involvement with CTC, Ingwe, Sasol, AngloCoal, i-Campus (Jacob)
 - Preparation of candidates for certificate of competency – invite junior engineers to regional meetings
 - Involvement with AMRE on preparation workshops (Andre)
 - Sensitise and ensure institutions obtain validation of CPD Cat 1 activities by SACEA (Mining House Representatives)
 - Explosion Protected Apparatus (EPA) training (Henk)
 - Active participation with all the stakeholders (SAFA, DME, Training Houses, etc)
- **Technical Visits and symposium (Schalk, Koos)**
 - Arrange technical symposium (Schalk, Andre)

SFA Task Allocation

Council Members



Johannes

Page 1

- ◆ **Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)**
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 - Value of SACEA with regards to ECSA credits
- ◆ **Involvement with SACMA Safety Forum (Rory, Johannes)**
- ◆ **Standardisation of (Johannes)**
 - CoP's, SoP's coordination between Mining Houses (Johannes)
 - Contractor Safety (with SACAFMA) (Lampies)
 - Common accepted generic induction framework between Mining Houses (uplift the standard)

SFA Task Allocation

Council Members



Thys

Page 1

- ◆ **Setting national standards for safety (Thys)**
 - Committee participation – (SANS, SAFA) (Thys, Henk)
 - Committee participation - OH&SPC (Charl)
 - Feedback to Council, Mandate from Council
- ◆ **Interact with service providers**
 - User Groups use Service Providers as venues for meetings – ensure interaction and alignment (Mark, Thys, Guy)

SFA Task Allocation

Council Members



Ephraim

Page 1

• **The legitimacy of SACEA (Lampies, Ephraim)**

- Achieve registration of 75% of SACEA members as professional Certificated Engineers by Dec 06
- 100% SACEA council members registered as professional Certificated Engineers by Jul 06
- Achieve membership of 230:
 - Sasol review quota on the basis of ECSA requirements
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■ **Continuous development of professional certificated Engineers through validation and monitoring CPD category 1 activities (Lampies, Ephraim)**

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SFA Task Allocation

Council Members



Ephraim

Page 2

- **Regional meetings and user sub-committees (Regional Chairman-Koos)**
 - **Directing of the User Groups (Koos, Ephraim)**
 - Underground – Mark
 - Plant – Thys
 - Open cast – Guy
- **Involvement in Secondary schooling sector (Ephraim, Jacob)**
 - **Establish a sub-committee that will develop a strategy/plan to attract learners to Coal Mining across all job levels (Jointly with SACMA and MPAs in Coal Mining Industry)**
 - Mine visits
 - Take learners on Technical Visits
 - Idea: Coal Mining Open day for schools....or join Tertiary Institutions in their Open Days, etc

SFA Task Allocation

Council Members



Koos

Page 1

- **Fun in SACEA**
 - Presidential Function Golf day.....Competition between Mining Houses...non-golfer participation, requirements from the President (Koos, Louis)
 - Golf at Regional Meetings (Koos)
 - Technical visit in Drakensberg/Lesotho Highlands Scheme and Goodyear Jhb (Koos, Lampies)
- **Development & Training (Andre/Koos)**
 - Involvement on commission of examiners (Koos)
- ✿ **Regional meetings and user sub-committees (Regional Chairman-Koos)**
 - Focus on the issues form the collective engineering challenges in coal mining (next slide)
 - Support User Group Forums Chairpersons (Schalk)
 - Directing of the User Groups (Koos, Ephraim)
 - Underground – Mark
 - Plant – Thys
 - Open cast - Guy
 - Technical Visits and symposium (Schalk, Koos)
 - Arrange 3 technical visits per annum (Koos, Lampies)
 - Arrange technical symposium (Schalk, Andre)

SFA Task Allocation

Council Members



Jacob

Page 1

- **Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)**
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 - Experiential training for private and non-bursary candidates using MQA funds
 - Value of SACEA with regards to ECSA credits
- **Development & Training (Andre/Koos)**
 - Continued involvement with CTC, Ingwe, Sasol, AngloCoal, i-Campus (Jacob)
- **Involvement in Secondary schooling sector (Ephraim, Jacob)**
 - Establish a sub-committee that will develop a strategy/plan to attract learners to Coal Mining across all job levels (Jointly with SACMA and MPAs in Coal Mining Industry)
 - Mine visits
 - Take learners on Technical Visits
 - Idea: Coal Mining Open day for schools....or join Tertiary Institutions in their Open Days, etc

SFA Task Allocation

Council Members



Rory

Page 1

- ◆ **Support by Engineering Managers, Heads of Engineering (David, Charl, Johannes, Jacob, Rory, Faizil, Lampies - SMO)**
 - Discuss support for Council member attendance of meetings
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 - In the newsflash, include % attendance of meetings (Regional & User Group) by Mining Houses (Simon)
 - Participation of junior and new members - Projects leading to presentations by Junior Engineers
 - Experiential training for private and non-bursary candidates using MQA funds
 - Value of SACEA with regards to ECSA credits
- ◆ **Arrange the SACEA Safety workshop – a must go for all in the industry! (Louis, Rory)**
- ◆ **Involvement with SACMA Safety Forum (Rory, Johannes)**

SFA Task Allocation

Council Members



Simon

Page 1

◆ Council Meetings

- *Reminder to council members on week before meeting for one pager feedback if not attending the meeting (Simon)*

◆ Communication with Heads of Engineering per Mining House (David, Simon)

- *Develop and circulate Presidents News Letter, etc*

■ Annual Membership Fees

- *Secretariat asked to do invoices electronically to Mining House representatives (Simon)*
- *Formal credit allocation only allocated upon payment of membership fees (Simon)*

■ Financial Management

- *Agenda point on council meetings – spend time on it! Minimum 30 minutes on meeting (David, Simon)*
 - *Outstanding memberships fees*
 - *Outstanding invoices for activities (Golf day, Safety Workshop, Presidential Function, Technical visits, Technical Symposium, CoalSafe)*
 - *Authorisations for payments*
 - *Variances and forecast*
 - *Expenditure on consultants*

SFA Task Allocation

Council Members



Mining House Representatives

Page 1

- ◆ **“Formalise” a SACEA Mine representative on all mines (Mining House Representatives)**
 - This should be done through the Engineering Managers
- Link from Mining House Intranets to COM SACEA website (Mining House Representatives)
- Annual Membership Fees
 - SACEA/ECSA strategy as vehicle to attract more members (Mining House Representatives)
- Development & Training (Andre/Koos)
 - Sensitise and ensure institutions obtain validation of CPD Cat 1 activities by SACEA (Mining House Representatives)

Closure