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#### Lessons learned from the NSW GGAS

New terminology - same imperatives in market driven action



#### Background...

- Booz & Company is a leading global management consulting firm, helping the world's top businesses, governments and other institutions.
- Global firm with 3,300+ professionals in 57 offices in more than 30 countries worldwide.
- Our firm is the oldest management consulting firm still in existence, the first to use the term 'management consultant', and the only firm to be a top-tier provider of consulting services in both the public and private sectors around the world.
- Since 1914, we have worked closely with our clients to create and deliver essential advantage. We bring unique foresight and knowledge, deep functional expertise, and a practical approach to building capabilities and delivering real impact.

The imperative to scale up mitigation efforts has driven the creation of a "new" set of terminology for market mechanisms

- Standardised baselines intended to reduce the uncertainty associated with deriving the most appropriate baseline for each and every project
- Additionality based on positive lists alters the question of additionality to being about "eligibility" rather than "intent"
- Better oversight and control of verification activities recognizes that auditors are useful but should not "own" scheme integrity risks
- Real compliance and enforcement pathways (such as those already in place within domestic jurisdictions) are critical tools in managing scheme integrity
- Aggregation of abatement activities the only option for large volumes of disperse abatement activities or for "collections" of abatement owners

<sup>...</sup> The sad thing is that these are not "new" at all...

## Australia has an energy complex which is GHG emissions intensive and employs market mechanisms in a number of areas

- Population / industry is concentrated in the eastern states which have an inter-connected electricity grid and deregulated market
- Energy prices are very low and most electricity is from coal (brown and black)
- Emissions are rising in almost all sectors of the economy, including via the clearing of forests
- Active power trading market, RECs trading, water trading, etc



# The NSW GGAS is a domestic carbon market mechanism which drives abatement projects across a number of sectors

- Mandatory program to reduce emissions primarily from the electricity sector while creating a firm 'price of carbon' for a range of key abatement activities
  - Low emissions power generation, supply side energy efficiency, demand side energy efficiency, industrial processes and carbon sequestration in forests
- Sets an annual abatement "quota" for the identified compliance buyers
  - Annual cap on sectoral emissions and hence abatement required is calculated using a variety of factors including State population and power demand
- Obligation to surrender abatement credits is on electricity retailers rather than on direct emitters
  - Retail electricity prices are regulated at State level
- Simple structure creates an effective carbon price and drives a wide variety of project-based GHG abatement activities



GGAS

## The "eligibility" and baseline treatments for abatement activities are carefully defined in a series of Rules

- Power generation (across the whole inter-connected power grid)
  - Low-emission power generation (less than standardised baseline)
  - Improved generator efficiency (compared to detailed baselines from historical operating data) and fuel switching
  - Avoiding methane emissions including from land fills, waste processes, CMM
- Energy efficiency (NSW only)
  - Improved energy efficiency in residential, commercial and industrial sectors
- Carbon sequestration (NSW only)
  - Kyoto-consistent afforestation and reforestation with 100 year 'permanency'
- Industrial process emissions (NSW only)
  - For large electricity users (smelting, steel, paper and pulp, chemicals, etc)

## The GGAS Legislative framework builds in the necessary flexibility to learn by doing and get the details right over time

- Compliance obligation imposed through State legislation and applies to entities already subject to State regulation (licensed electricity retailers)
- Legislation uses a Regulation to define the role and powers of "Scheme Administrator" which is created within an existing professional regulatory agency
- The details of key factors, project eligibility and methodologies are contained in a series of Rules that can be refined by the Minister
  - No. 1 Compliance (detail on liabilities and key factors)
  - No. 2 Power generation (across the inter-connected grid)
  - No. 3 Energy efficiency (NSW only)
  - No. 4 Industrial processes (Large users only, NSW only)
  - No. 5 Carbon sequestration in forests (NSW only)

http://www.greenhousegas.nsw.gov.au/



## Implementation of GGAS began in late 2002 with formulation of the Rules... it was operational by August 2003

- Some guidance was provided in the Regulations on requirements and processes but it was up to the Scheme Administrator to define detailed steps
  - Project assessment process, verification framework, monitoring approaches, Registry design, creation of audit panel, governance and information flows
- An intense development process took around nine months to go from a clean sheet of paper to registered projects and certificates
  - Trial assessments, road testing of Rules (methodologies) for each type of abatement activity, development of documents and guides, establishment of audit guidelines and audit panel, auditor training, setting monitoring criteria
  - Communication, communication, and some more communication...
- Processes and frameworks have continued to be developed and refined since 'launch' in August 2003, including forests in late 2004 and programmatic in 2005

#### **Project assessments are undertaken by the Scheme Administrator who uses audits to meet specific assurance requirements**

- The Scheme Administrator does the vast majority of the project assessment work
  - Clear and prescriptive Rules are supported by detailed practical guidance
  - Electronic work flow tools are used to streamline administrative processes
- Audits are used selectively (minimises costs across the system)
  - Scheme Administrator defines audit requirements for abatement activities based on a risk-based intelligence-led approach
  - Flexibility exists on how often audits happen, what matters are covered by the audit, appropriate audit procedures, easing or intensifying of auditing over time)
  - Scheme Administrator is always the auditor's client
- Risk of non-compliance is "owned" by the Scheme Administrator
  - Risk is not outsourced to auditors
  - System-wide risk is managed in a sophisticated way to minimise the burden of administrative processes while maintaining overall scheme integrity

### Up front costs to participate in GGAS are intended to minimise barriers for legitimate applications

- \$500 application fee for each application to register an abatement activity
- A program of activities may be included in one application (one fee):
  - One technology/approach multiple sites
  - One site multiple technologies/approaches
- Audit costs are borne by the applicant
  - Low risk activities may not be required to be audited prior to registration
  - All abatement activities are audited at least once
  - Experience so far shows GGAS audits to be much cheaper than CDM validations or verifications
- Fee of 15 cents for each credit issued for the abatement activity, intended to eventually fund the operations of the Scheme Administrator and Registry

#### Ongoing compliance and performance monitoring is done using the standard tools of a professional regulatory agency

- Ongoing performance and compliance with scheme requirements is actively monitored by the Scheme Administrator:
  - The audit regime (annual, biannual, spot-basis)
  - Periodic reporting (using templates and electronic submission)
  - Incident reporting (particularly for carbon sequestration activities)
  - Reports and controls within the Scheme Registry
- The Scheme Administrator has powers to pursue data and records, undertake investigations and special audits, and penalise participants (credits / \$ / jail)
  - Enforcement and appeals are via existing State institutions and processes
- Credits are issued in to the Scheme Registry as per the specific registration conditions (ie, pre-issuance audit requirement, periodic audit, volume-based, etc)
  - They can then be transferred to other accounts as per contracts, etc

Comprehensive guidance is a key part of the Scheme's success, and has allowed participants to produce and submit quality materials

- GGAS is broad with prescriptive Rules, creating a large range of projects and a wide audience
- Clear objective is to make GGAS user-friendly which prompts the development of a range of documents, eg
  - summary text on the web site
  - brief fact sheets and various case studies
  - comprehensive application forms and guides to applying for each Rule
  - specific guides on record keeping, Registry, etc
- Scheme Administrator also meets with participants to discuss abatement activities and provide guidance



### GGAS provides useful insights for the creation of new "abatement recognition systems" in domestic situations

- GGAS is not an "offsets" system in the traditional sense
  - The core process is to recognise and quantify the outcomes of eligible abatement activities
  - The credits created are then used to meet compliance obligations (allowing those companies to avoid fines from the regulator) creating a real carbon price
- Appropriate risk management approaches, employed by a professional regulatory agency, and leveraging existing domestic enforcement capabilities can drastically reduce the cost burden for participants
- Standardised baselines are possible, and practical
- Demonstrating eligibility is much more predictable and transparent than demonstrating additionality

