

OUR ROLE is to deliver realised value to growers, millers and other customers from targeted research, development and extension

HIGH PRIORITY ACTIONS	INITIATIVES	HOW WE WILL KNOW WE ARE ACHIEVING OUR GOAL
DEVELOP IMPROVED CONVENTIONAL VARIETIES AND ENHANCE THEIR ADOPTION 	<ul style="list-style-type: none"> Develop new sugarcane varieties that meet agreed performance specifications for key production traits in each region Shift germplasm base to increase the frequency of smut-resistant clones Introduce novel genes from wild and imported germplasm to address key production constraints and new products Improve breeding efficiency by developing indirect selection tools such as NIR spectroscopy and molecular markers Develop and implement cost-efficient propagation technologies for rapid adoption of new sugarcane varieties Enhance variety adoption and risk management to maximise returns from optimal variety mixes Implement a PBR end-point royalty scheme 	<ul style="list-style-type: none"> 2-3 new high-yielding smut-resistant varieties released each year >90% of Australian industry planted to PBR-protected varieties by 2011 High-yielding, smut-resistant varieties available for major soil types by 2011 Use of introgression germplasm and imported clones meets annual agreed targets NIR and marker-assisted selection methods evaluated for implementation in breeding program by 2011 10% of new varieties distributed using rapid propagation technologies by 2013 On-line decision-support tool for varieties (QCANESelect™) released for grower use by 2010 PBR end-point royalty scheme implemented by December 2011
DEVELOP AND COMMERCIALISE GM VARIETIES	<ul style="list-style-type: none"> Develop transgenic events for commercialisation Incorporate GM traits into the breeding program Develop strategy and processes for the commercialisation of GM sugarcane 	<ul style="list-style-type: none"> Commercially relevant GM traits identified and tested by 2013 Crosses made with GM varieties by 2013 Field evaluation, licensing and regulatory compliance established by 2012
SUPPORT AN EFFECTIVE BIOSECURITY CAPABILITY FOR THE AUSTRALIAN SUGARCANE INDUSTRY	<ul style="list-style-type: none"> Provide quarantine facilities for exchange of varieties with other countries, and for movement within Australia Cooperate with government and industry to minimise the likelihood of entry of exotic pests and diseases Develop management plans for exotic pests and diseases, and undertake industry education to minimise the economic impact of any incursion 	<ul style="list-style-type: none"> 50 varieties imported from overseas each year and released after ensuring freedom from exotic pests and diseases 2500 clones exchanged among regions within Australia each year without spreading pests and diseases Industry supported through effective disease and pest diagnostic services and training programs Contingency plans updated and new plans developed for significant threats to incorporate new research results by 2011 50 Australian varieties screened each year to determine their resistance to downy mildew, Ramu stunt and stemborers
DEVELOP AND DELIVER ALTERNATIVE PROCESSING METHODS AND OTHER PRODUCTS DERIVED FROM SUGARCANE	<ul style="list-style-type: none"> Partner with external organisations to deliver commercial outcomes in both sugar and non-sugar product areas such as food and drink products, fibre products and nutraceuticals 	<ul style="list-style-type: none"> Factory measurement and process control solutions implemented for low glycaemic-index (GI) sugar production by 2009 Cane separation technology commercialised to produce juice and fibre products by 2010 Commercialisation options for GI-lowering extracts assessed by 2011
DEVELOP SYSTEMS FOR SUGARCANE-BASED BIOREFINERIES	<ul style="list-style-type: none"> Utilise sugarcane crop biomass through production of first and second-generation biofuels, cogeneration of electricity or specialty chemicals 	<ul style="list-style-type: none"> Strategy developed for participation in production of first and second generation biofuels, specialty chemicals and cogeneration of electricity Relevant RD&E program initiated to address high priority breeding and cropping-systems objectives
DELIVER R&D-BASED TAILORED SOLUTIONS THAT IMPROVE THE SUSTAINABILITY OF OUR CUSTOMERS' BUSINESSES	<ul style="list-style-type: none"> Value of BSES services to each customer recognised and priced accordingly Deliver specific productivity improvement programs for growers, mills, regions and/or industry Foster collaborative partnerships to leverage expertise and opportunities to improve on-farm uptake of R&D outcomes 	<ul style="list-style-type: none"> Revenue from fee-paying customer base increased Innovative extension delivery models developed to optimise industry-wide adoption of best management practices by 2013 80% of cane produced by growers who are implementing best management practices by 2012 Contracted Service Level Agreement targets achieved in each year
DEVELOP FARMING SYSTEMS THAT IMPROVE THE SUSTAINABILITY AND SUPPLY SECURITY OF OUR CUSTOMERS 	<ul style="list-style-type: none"> Develop and deliver BSES-branded packages to progress the adoption best-management practices on-farm Conduct RD&E to promote innovative farming practices Maximise combinations of crops and farm uses to improve farm profitability and sustainability 	<ul style="list-style-type: none"> Greyback and Childers canegrub decision-support packages in use by 2011 and developed into on-line systems by 2013 Grub-management package for new farming systems developed by 2010 New insecticide for canegrubs evaluated and decision made on commercialisation by 2013 New insecticide for soldier fly evaluated and decision made on commercialisation by 2010 Integrated management package for climbing rats developed by 2012 'Easy Steps' guide for integrated weed management released by 2013 Integrated on-line nutrient-management support system released by 2011 Six Easy Steps nutrient management workbooks and workshops developed for all regions by 2012 Guidelines for the amelioration of acidic and sodic soil conditions within the new farming system developed by 2012 Harvest best-practice manual updated by 2010 In-field sucrose loss system developed by 2012 Yield monitors validated for accuracy for yield mapping by 2010 Benefits of precision agriculture for targeting on-farm inputs determined by 2012 Nutrient and water strategies optimised to make best use of inputs and with minimal off-site effects by 2013 Appropriate varieties defined for use within new farming systems by 2011 Appropriate combinations of crops and farm uses determined for each region by 2013 Strategies for enabling improved resilience of sugarcane cropping systems to changing climate identified by 2012
DEVELOP AND DELIVER TECHNOLOGIES THAT IMPROVE SUGAR FACTORY PERFORMANCE	<ul style="list-style-type: none"> Develop and commercialise innovative technologies to improve factory performance Evaluate inter-relationships between cane quality and sugar quality Provide CaneCheck services for cane analysis and auditing requirements 	<ul style="list-style-type: none"> High quality service provided to factory installed cane - (CAS), sugar - (SAS) and bagasse-analysis systems (BAS), and provide support to achieve key commercial targets Juice stream decolourisation technology investigated and commercialised CaneCheck services supplied to participating Australian mills
MAXIMISE PROFIT FROM BSES INTELLECTUAL PROPERTY, PRODUCTS AND SERVICES 	<ul style="list-style-type: none"> Provide high quality analytical services and data to external organisations that support both service and R&D agendas 	<ul style="list-style-type: none"> External and internal acceptance of BSES analytical services as a commercial alternative Contracted targets achieved in each year

HOW WE WILL OPERATE: Industry leader | Customer focus | Commercial performance | Innovation and creativity | Teamwork and effective collaboration | Motivated and skilled staff | Safe workplace