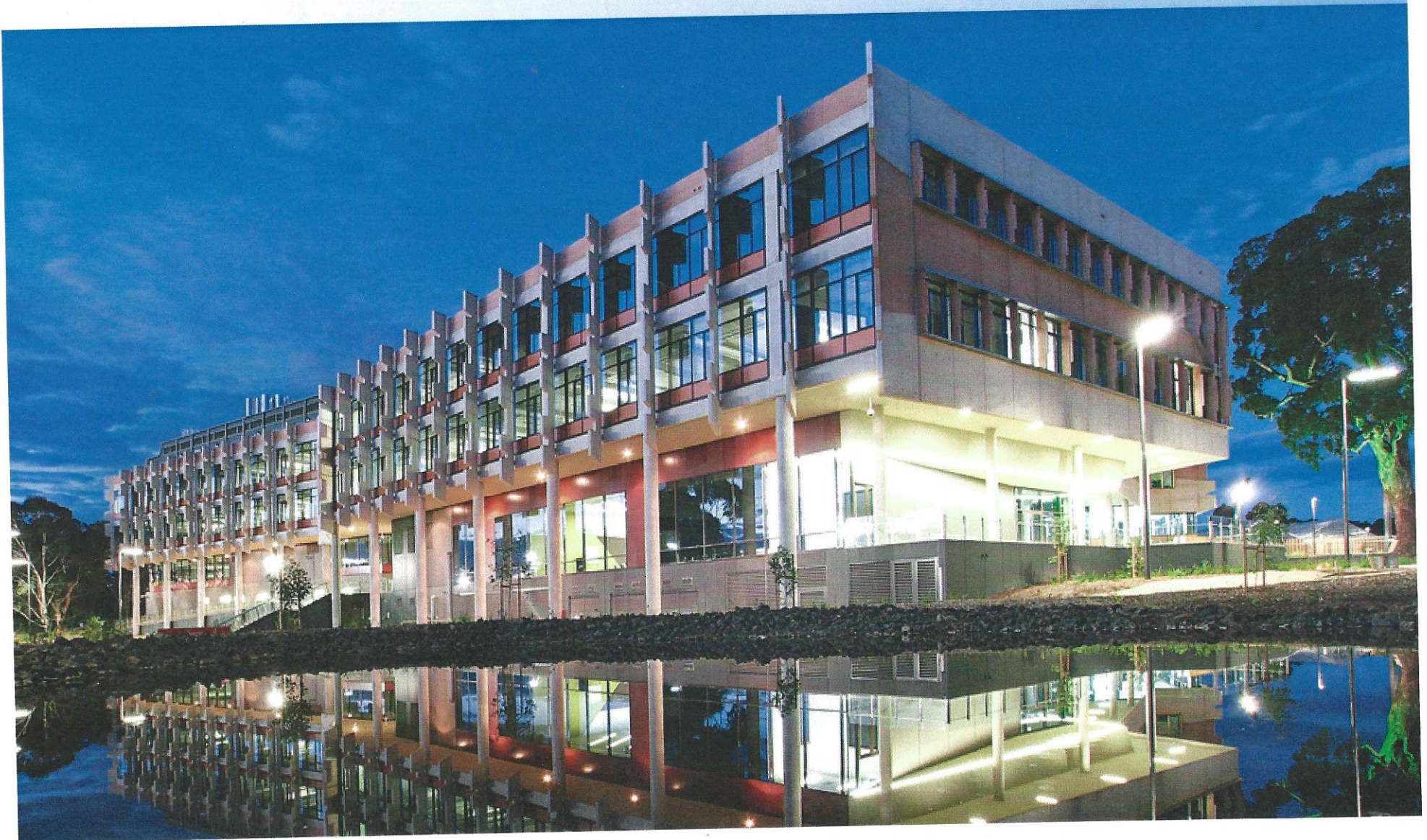


NSW Discussion Group visits

February 2016

David Nation, CEO

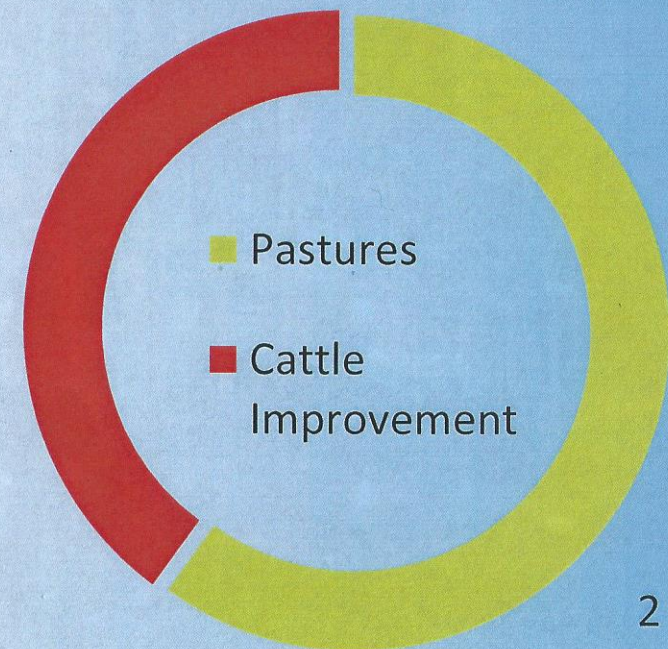


Will complete Term on 30th June 2016

6 ½ years of large investment (\$137 million). Farmer levy has been leveraged ~10:1

Straight forward path to on farm impact (seed, semen)

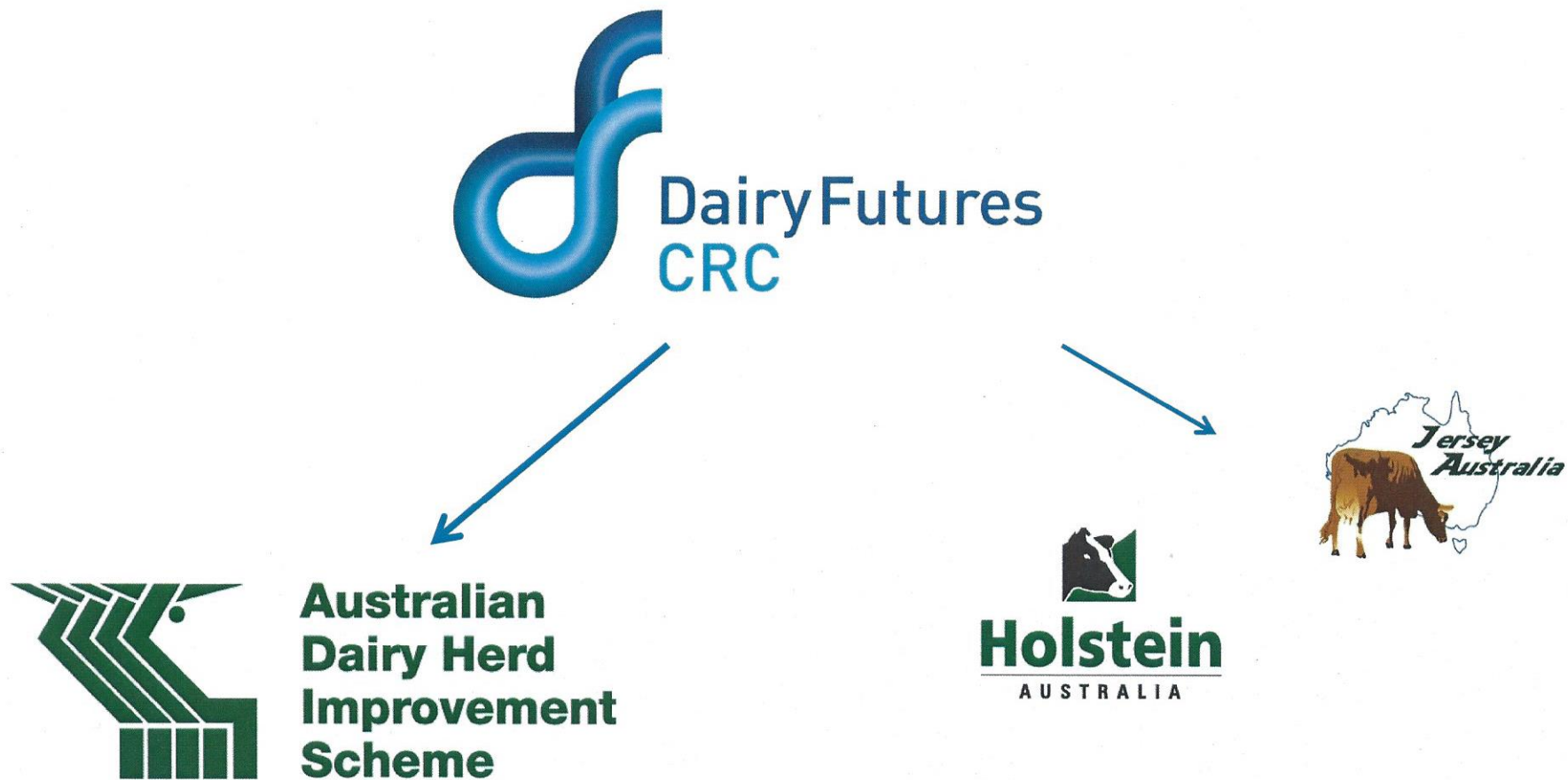
Education outcomes are a highlight
35 students set to graduate
over 10,000 GiG participants



Cattle innovations



How does the CRC have an impact?



Span of traits


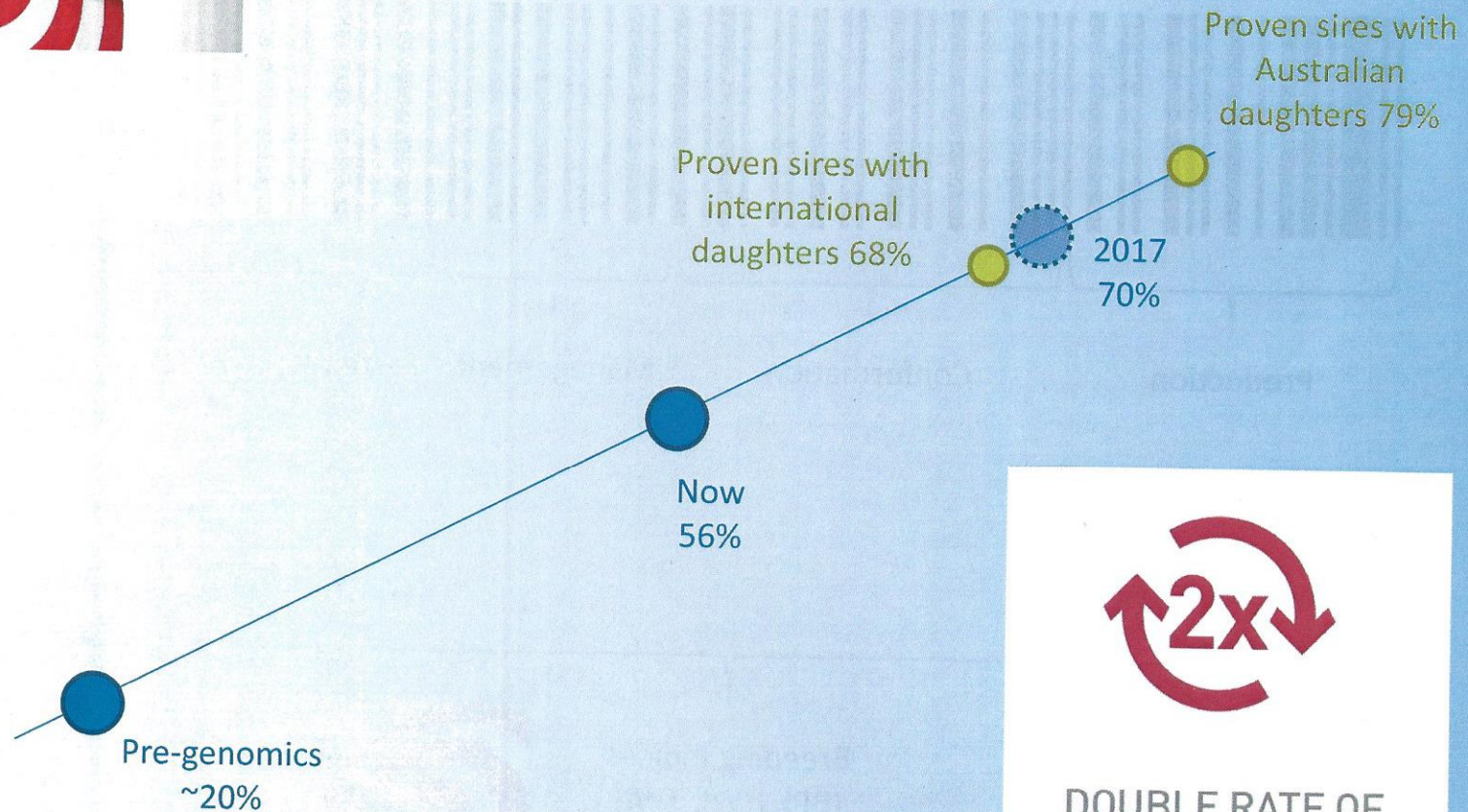


Breeding Indices
(BPI, HWI, TWI)





Target 70% reliability for breeding indices of young sires



DOUBLE RATE OF
GENETIC GAIN

Span of traits

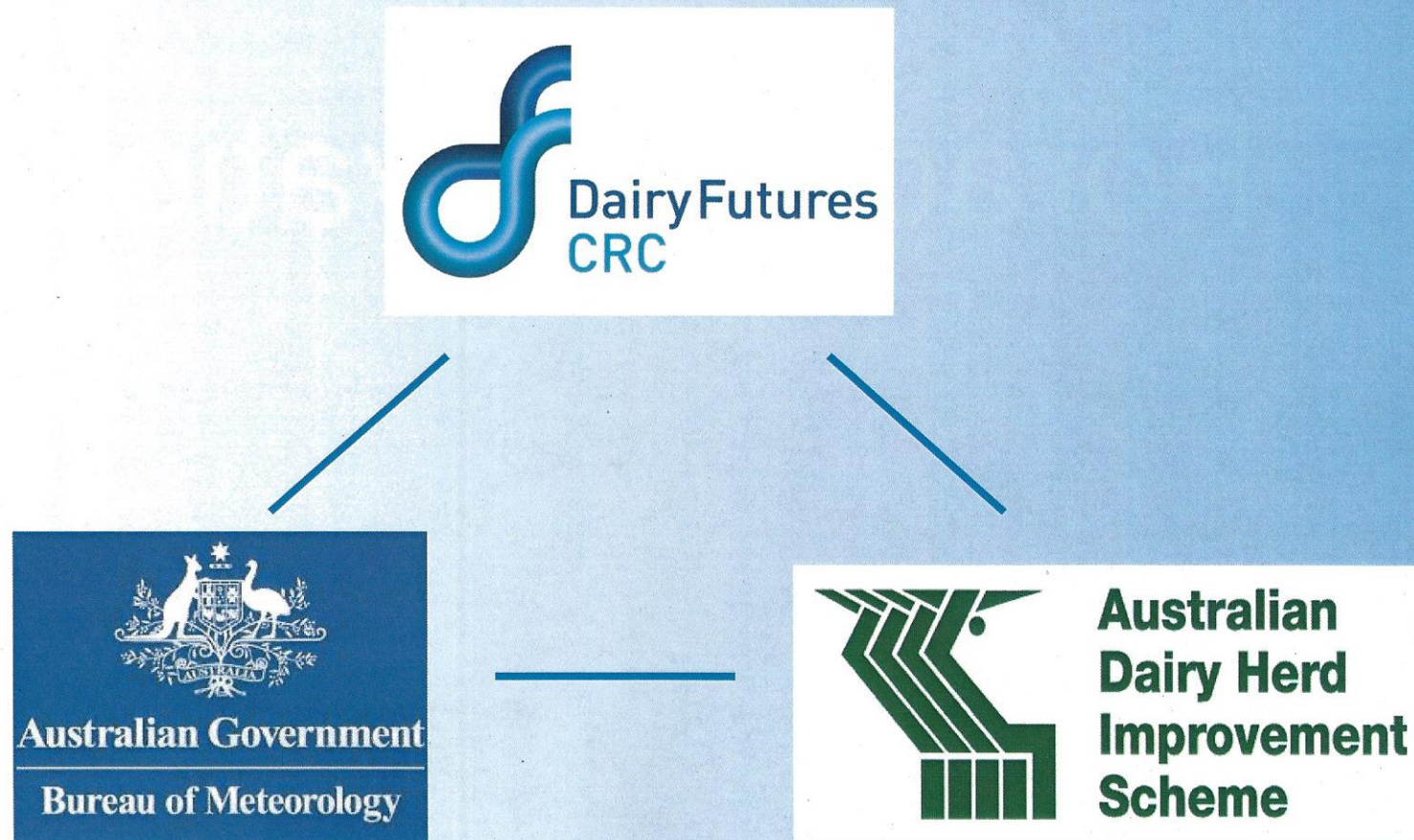


Feed Saved trait

- New in April 2015
- Breed cattle that require less feed for the same milk production



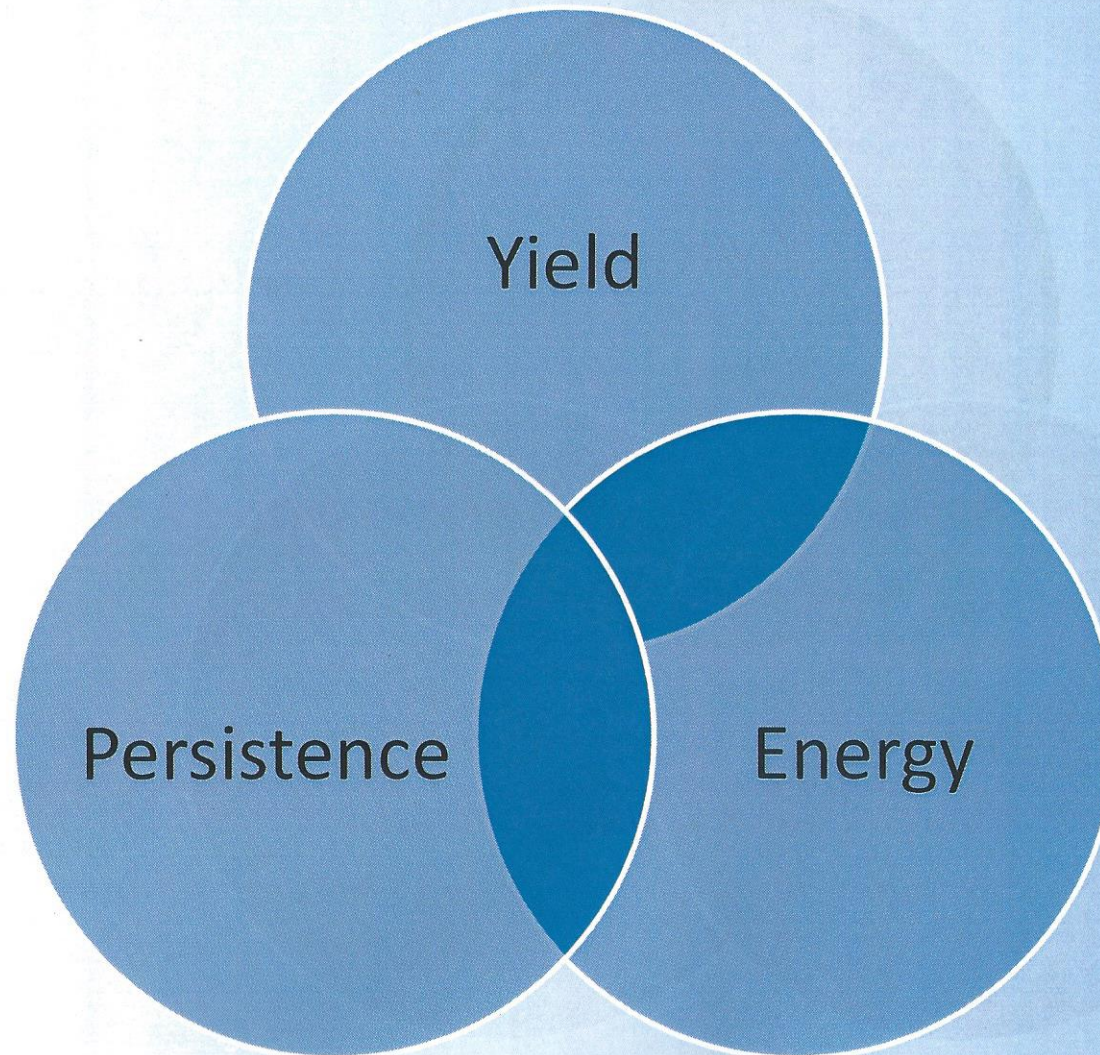
How have we developed a heat tolerance trait?



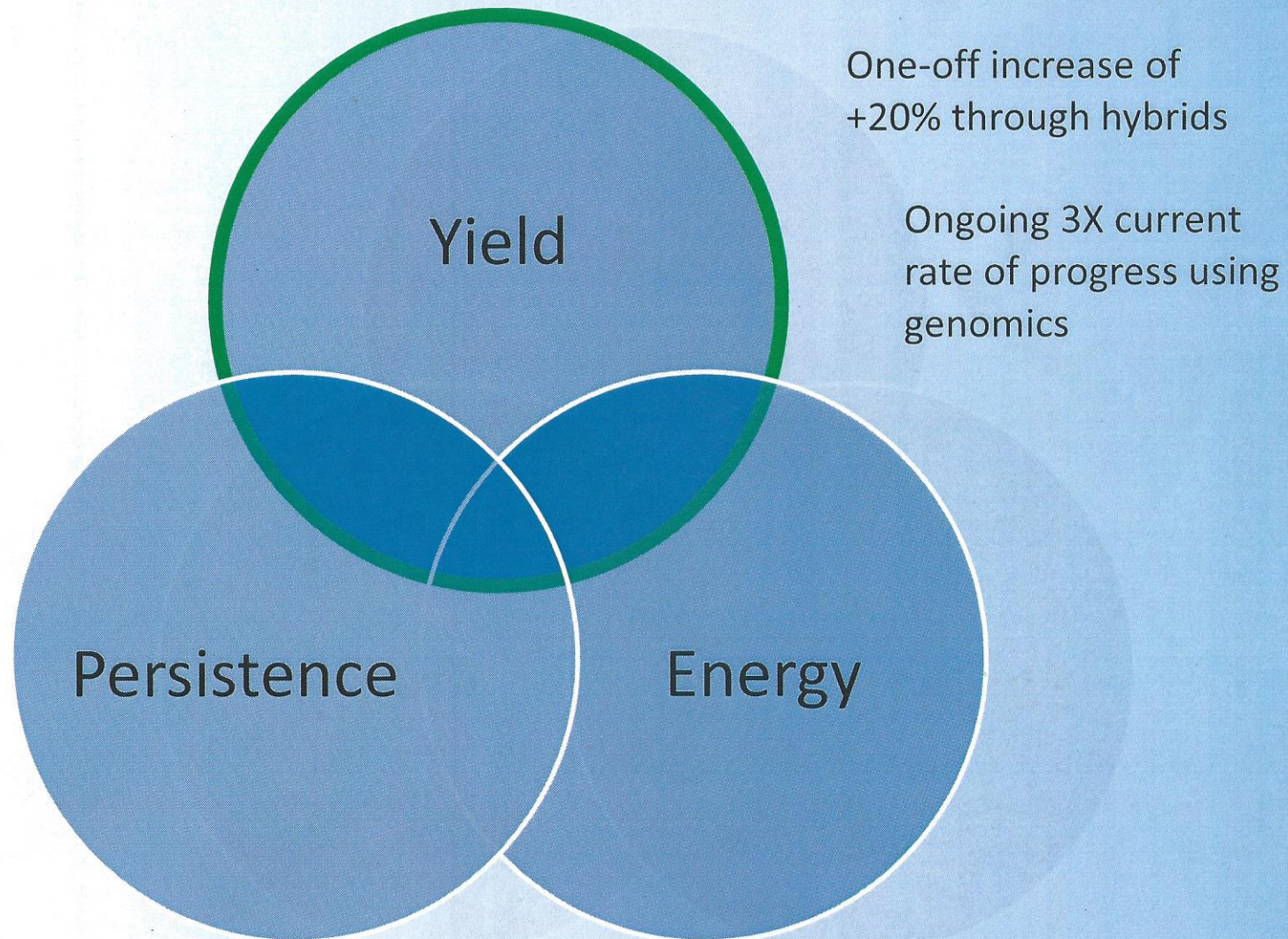
Forage innovations



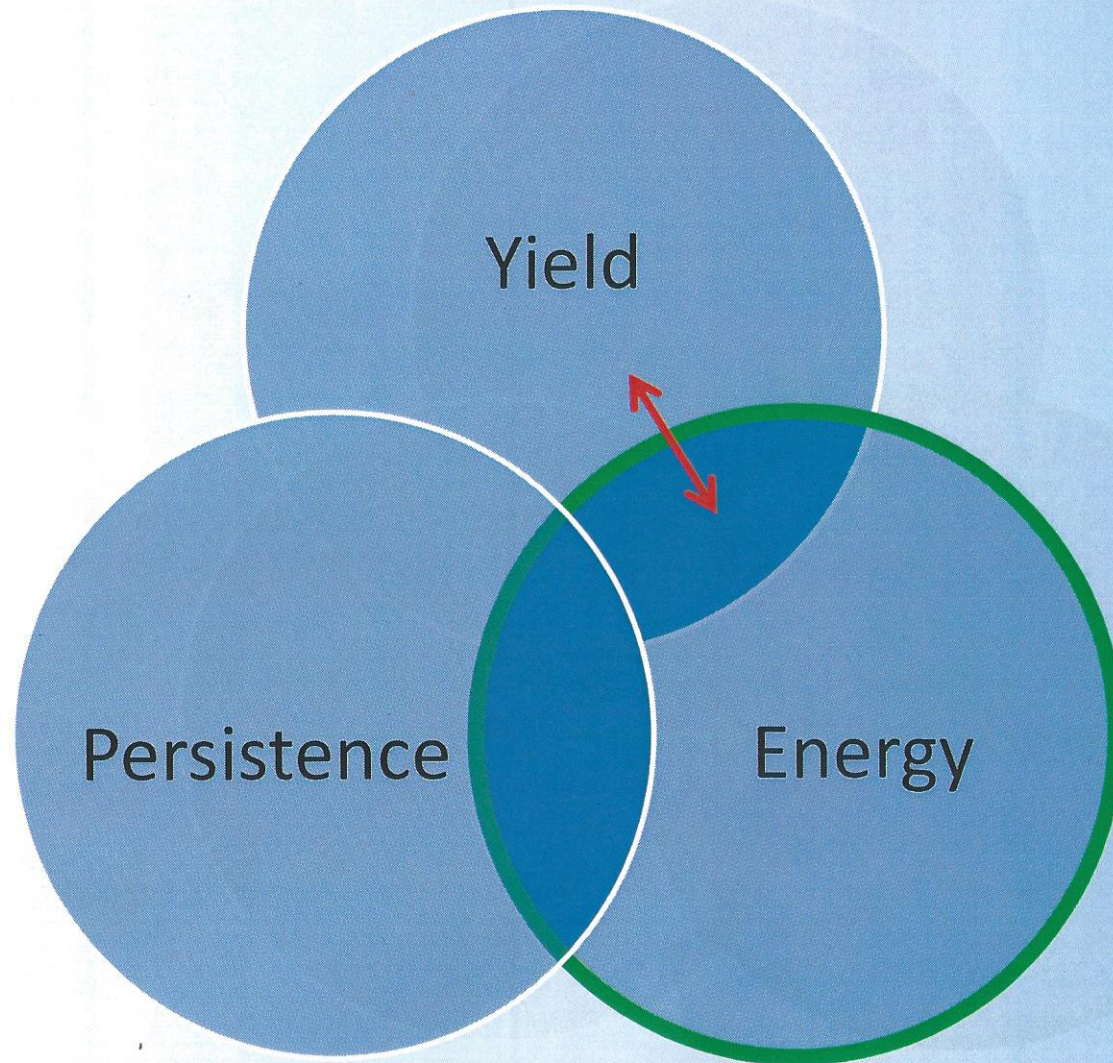
Core targets for pasture breeding



Core targets for pasture breeding



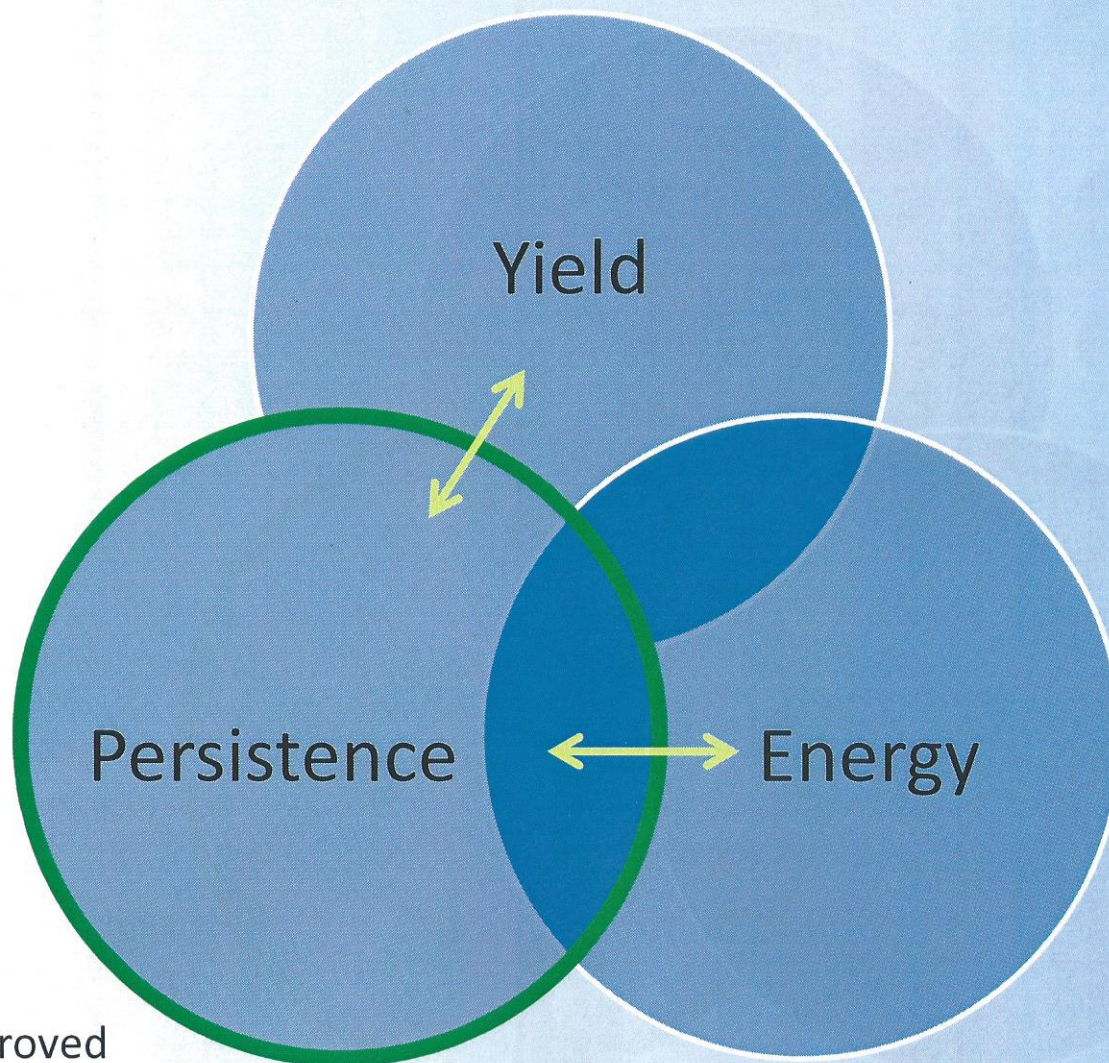
Core targets for pasture breeding



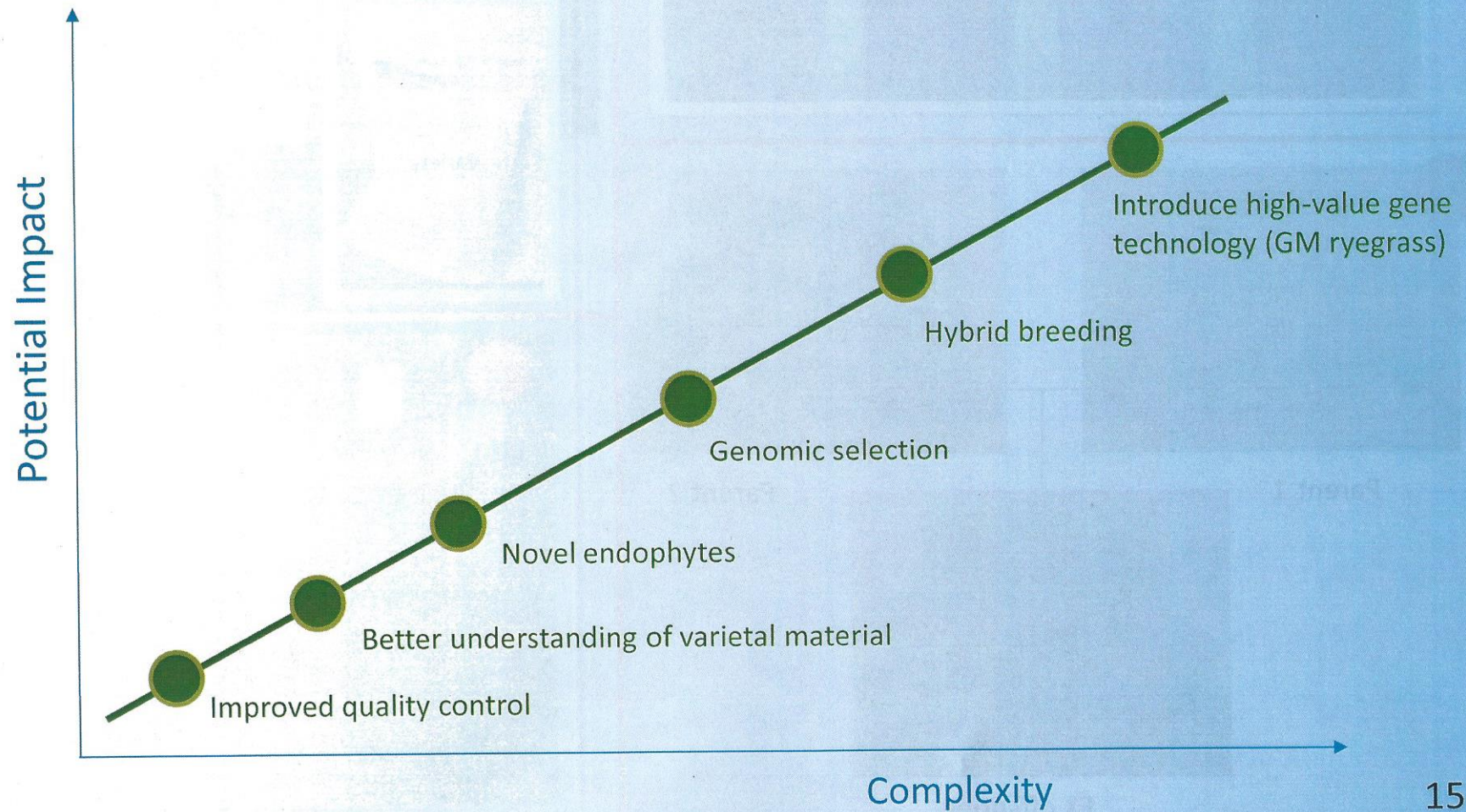
Smart selection of plants: 0.3MJ increase

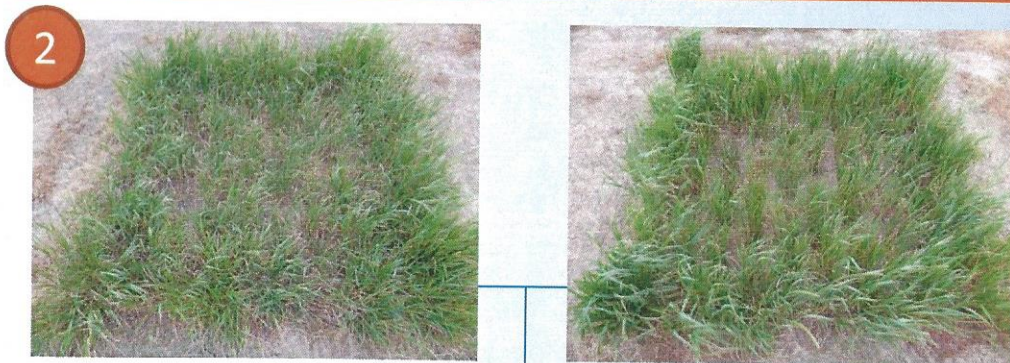
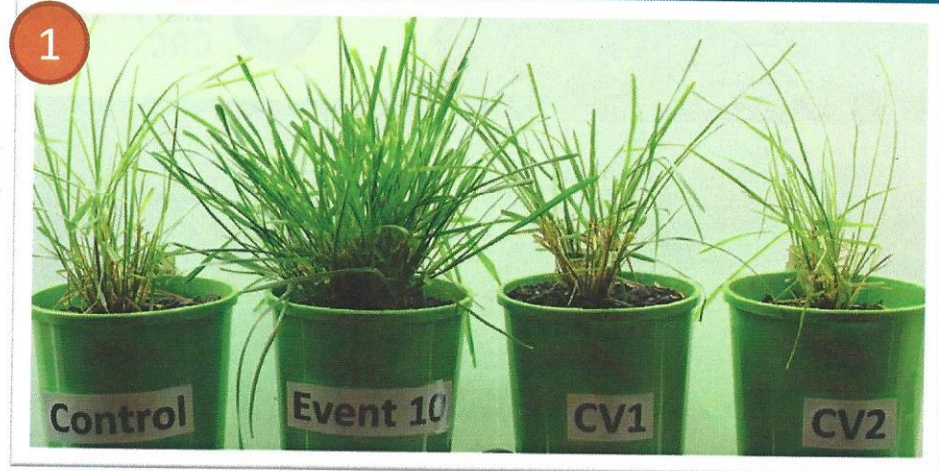
High Energy Ryegrass (GM): +1MJ

Core targets for pasture breeding



+1 year: improved
endophytes





Parent 1

Parent 2



F1 offspring



Pasture innovations deliver large on farm impacts

Key reference points:

5y Average EBIT: \$736/Ha

FVI 1 vs 5 stars ~ \$500/Ha



+\$400/hectare

YIELD GAIN
THROUGH HYBRIDS



+\$170/hectare

1 YEAR
LONGEVITY GAIN



+\$180/hectare

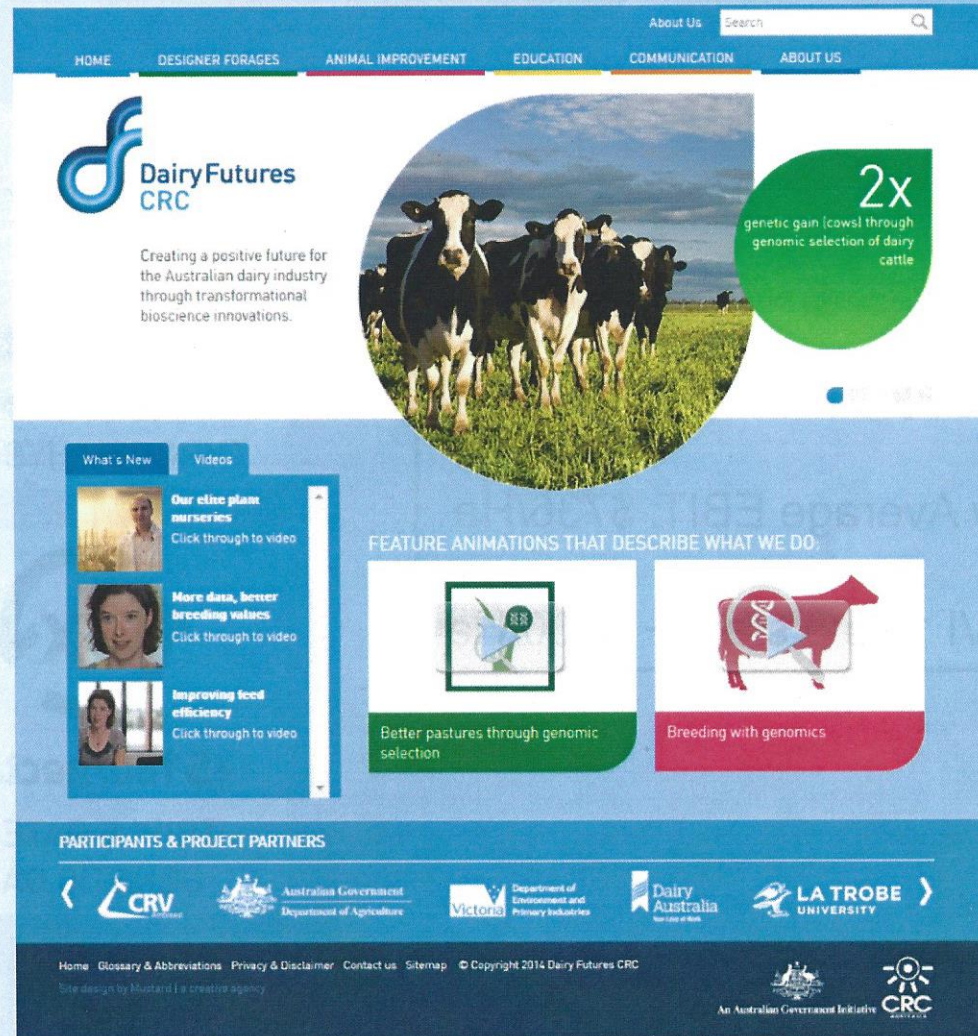
TRIPLE RATE OF
GENETIC GAIN



Up to \$750/hectare

HIGH ENERGY (GM)
RYEGRASS

More detail
available
via our
website



The screenshot shows the Dairy Futures CRC website homepage. At the top, there is a navigation bar with links for HOME, DESIGNER FORAGES, ANIMAL IMPROVEMENT, EDUCATION, COMMUNICATION, and ABOUT US. A search bar is located on the right side of the navigation bar. Below the navigation bar, the main content area features the Dairy Futures CRC logo on the left, with the tagline "Creating a positive future for the Australian dairy industry through transformational bioscience innovations." To the right of the logo is a large circular image of a herd of black and white cows in a field. A green circular graphic next to the image contains the text "2x genetic gain (cows) through genomic selection of dairy cattle". Below the main content area, there is a section titled "What's New" with three video thumbnails: "Our elite plant nurseries", "More data, better breeding values", and "Improving feed efficiency". To the right of this section is a section titled "FEATURE ANIMATIONS THAT DESCRIBE WHAT WE DO" with two animation thumbnails: "Better pastures through genomic selection" and "Breeding with genomics". At the bottom of the page, there is a section titled "PARTICIPANTS & PROJECT PARTNERS" with logos for CRV, Australia Government Department of Agriculture, Victoria Department of Environment and Primary Industries, Dairy Australia, and LA TROBE UNIVERSITY. The footer contains links for Home, Glossary & Abbreviations, Privacy & Disclaimer, Contact us, and Sitemap, along with copyright information for 2014 Dairy Futures CRC and the Australian Government Initiative logo.

DairyBio

The continuation of dairy bioscience research from
2016 to 2021

Vision of success for Dairy Bio


Dairy Bio – Better Pastures

\$800/HA p.a.

3X

**PROGRESS
IN PASTURE
BREEDING**

(eg 21 years of
genetic gain
delivered in 7
years)

 **20%**
BOOST

in yield through hybrid vigour

+2



MEGAJOULES

High energy pastures

+3 YEARS

A longer productive life

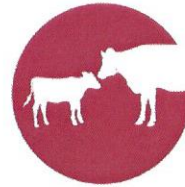


DELIVERED INTO EXISTING SEED MARKET

with no new regulation and with improved QA

Dairy Bio – Better Cattle

\$350/COW p.a.



+50%

GENETIC GAIN

From 80% reliable
genomic breeding
values, 3 generations
in 6 years c.f. 9 years

1/2 COST OF GENOMIC TESTING
in addition to cost savings from the CRC

+\$80
/COW

via DNA based
targeted cow
management tools



**10% LOWER
HEALTH COST**

Selection for health traits

DELIVERED INTO EXISTING H.I. MARKET

with a new focus on cow performance

Modern infrastructure for dairy bioscience

