

GLOBAL CHALLENGES . GENOMIC SOLUTIONS

SCALING UP 2017

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Marc LePage President and CEO, Genome Canada



Barton was right – Bioeconomy rules in Canada

Total Canadian goods exports 2015	\$525 billion
Motor vehicles and parts	\$87 billion
Energy products	\$84 billion
Aircraft and parts	\$25 billion
Bioeconomy: farm, forest, fish, food	\$102 billion

Source: Stats Canada



Digital Code

Biological Code



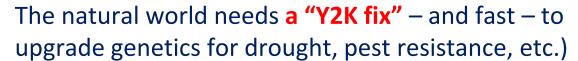
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DNA is the "operating software" of all living things. By allowing us to read DNA encoded in the genome, **genomics** enables us to make biological "upgrades."



The Climate Challenge Opportunity







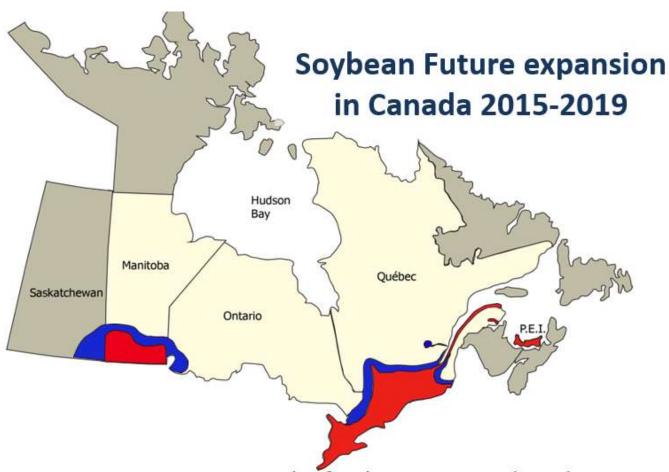
Forestry



The Mountain Pine Beetle has devastated Western Canada forests.



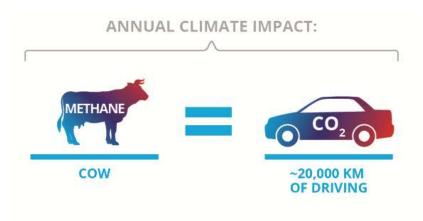
Agriculture



- In a position to expand a further 1.3M Ha (60%)



Cleantech (enzymes, conversion)



Reduced methane



Biofuels



Bioplastics

