






# Downer

**TRANSPORTATION**  


**WATER**  


**TELECOMMUNICATIONS**  


**ENERGY**  


**FACILITIES MANAGEMENT**  


## Our Sustainable Journey

Downer 1



## Balancing People, Planet and Profit



GDP growth  
economics



Climate Change

In the context of our sustainability programme

Downer 2

## Driving from the top



- Global CEO/MD
  - Audit and Risk Committee
  - 30% incentivised
- NZ CEO
  - Commercial drivers Reputation
- EGM Zero Harm & Risk
  - Strategic Fit
  - Best Practice
- Sustainability Manager
  - Implementation
  - Tracking success



**Downer** 3



## Staff Engagement – joining the dots!

- Th?ink Sustainable Workshops
- Sustainable Development Action Plans (SDAP's)
- Language and literacy training
- Work planning, communication, coaching, mentoring (Way 2 Work)
- Aspiring and Inspiring leaders (ILP)
- Safety values and behaviours(KPI's)
- Environmental management (KPI's)
- Health and wellness support/ EAP
- Local Iwi support
- Health insurance and rehabilitation programmes
- Sponsorship based around sports and wellness

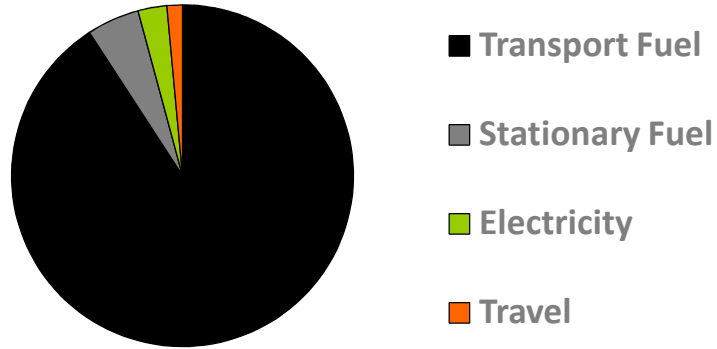


CARBON DISCLOSURE PROJECT

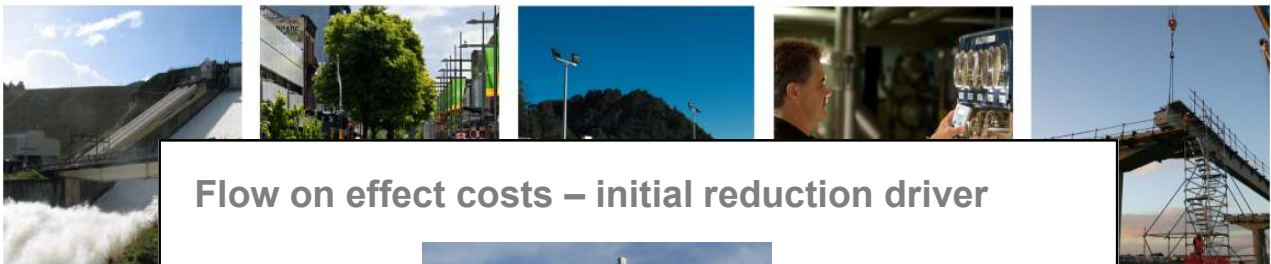


## Case Study: Fuel reduction

Source of GHG emissions for Downer 09-10



**Downer** 5



## Flow on effect costs – initial reduction driver



**Downer** 6

## Case Study

Target: to reduce fuel consumption intensity by 15%

Driver training - SEED  
 GPS (\$4.2m)  
 Fleet selection  
 SmartDrive (WebCam)  
 Alternative fuels  
 Energy and fleet audits  
 R+M (education)  
 Videoconferencing  
 Carpooling



**Achieved: 23% reduction FY 2009-10**

**Downer** 7



## Tangible savings FY 2009-10

- A. Fuel savings \$1.61million
  - B. 65% reduction in MV claims, saving \$495k in premium for FY 2010-11
  - C. Burning cost formula returned \$452k at year end
  - D. Excess claims reduced by \$123k
  - E. Repairs and maintenance reduced 18% (\$543k)
- Fuel + Plant efficiency returns – 3.23 + .688 = **\$3.911 million**



**Downer** 8

## Plant Energy - Efficiency

- 11 Asphalt Plants
- 6 Quarries
- 7 Bitumen Tank Farms
- 2 Bitumen Port facilities
- 2 Emulsion Plants

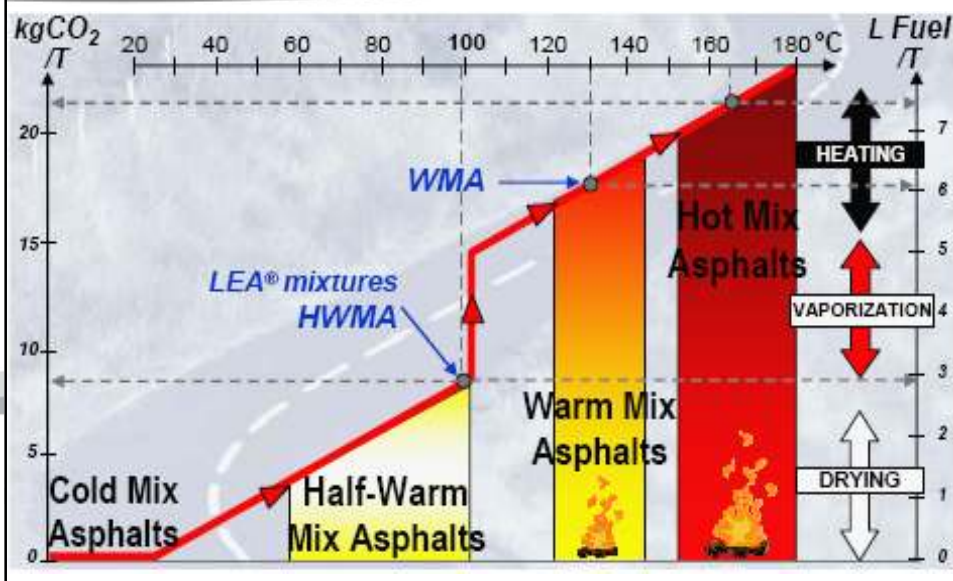
Audit costs - \$75k



1. Efficiencies identified in every location
2. 65% savings available without CAPEX
3. Implementation in **2009/10** – Energy reduction **7,283,485 kWh**
4. GHG reductions CO<sub>2</sub>-e **2,840 tonnes**  
Cost savings year 1 - **\$688,000**



## Reducing Production Energy - WAM



# Emissions Reduction



## We deliver infrastructure solutions for sustainable futures

We value and invest in processes that help us to create products using reduced energy, high levels of recycling and a low carbon footprint. Warm Asphalt Mix and Recycled Asphalt Product (RAP) are just two ways Works is fostering a zero harm environment by improving sustainability in road construction for our clients and communities.

### Opportunities for energy reduction: Warm Asphalt Mix vs Hotmix

Warm Asphalt Mix: a sustainable alternative



Warm Asphalt Mix is produced at a lower temperature than Hotmix. This provides:

- Substantial energy savings in storage, production and delivery stages
- Less emissions
- Increased usability
- Improved safety for staff and public
- Increased productivity
- Increased ability to incorporate higher levels of RAP into products
- Improved product versatility

Hotmix: higher heating temperature reduces efficiencies



### Recycled Asphalt Product (RAP)



Our asphalt plant in Somerton, Victoria, uses world's best practice to produce:

- High quality recycled asphalt (asphalt product includes up to 50% RAP)
- Significant energy savings
- Zero waste and reduced landfill
- Effective capturing and binding of hydrocarbons to create new asphalt
- Marked cost savings for the business and the wider community


### RAP Recovery - Recycling - Re-use




Advertising your Green Credentials

## Overall Lessons

- Align with your Core Business Model
- Integrate into Day-to-Day Operations (Efficiency)
- Actively Engage and Empower Employees
- Provide tangible (local) benefits



**Branch Sustainable Development Action Plan**



**Branch: Waikato Area**

SD Plan Issue Date	Document Preparation & Control SDE Advisor	Document Authorisation Branch Manager
February 2011	Kelvin Vainithi	Andy Mooky

Comment on this issue:  
Reviewed throughout to ensure compliance with processes and practices in line with Downer's Corporate Social Responsibility and Sustainability Objectives and compliance and maintenance of Downer's ISO 14001 accredited Environmental Management System.



## Payback

- Clients - understanding
- Stakeholders & shareholders
- Industry & supply chain influence
- Efficiency and reputation
- Innovation Driver

