



CLIENTS | PEOPLE | PERFORMANCE

Improving Environmental Leadership

with Resistance to Change and Behavioural Change Programs

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The Sustainability Challenge



- Regulatory and consumer pressures on organisations to improve environmental performance
- Focus on limited world food supplies and natural resources
- Pressure on Industries to reduce costs
- Changing systemic problems and policy issues
- Dealing with people who may not want to change

Most organisations do not integrate environmental management principles into the day to day business very well – changes have been small and mostly based on compliance



What is the key role of an Environmental Practitioner ?

1. Understanding whole of business/Industry
2. Being politically savvy
3. Articulating a vision of how things can be different
4. Working with and motivating others
5. Building alliances
6. Taking risks in small steps
7. Challenging the status quo
8. Listening to criticism
9. Getting out of our comfort zones
10. Letting passions show



Banksy Art

A “lone nut” ?



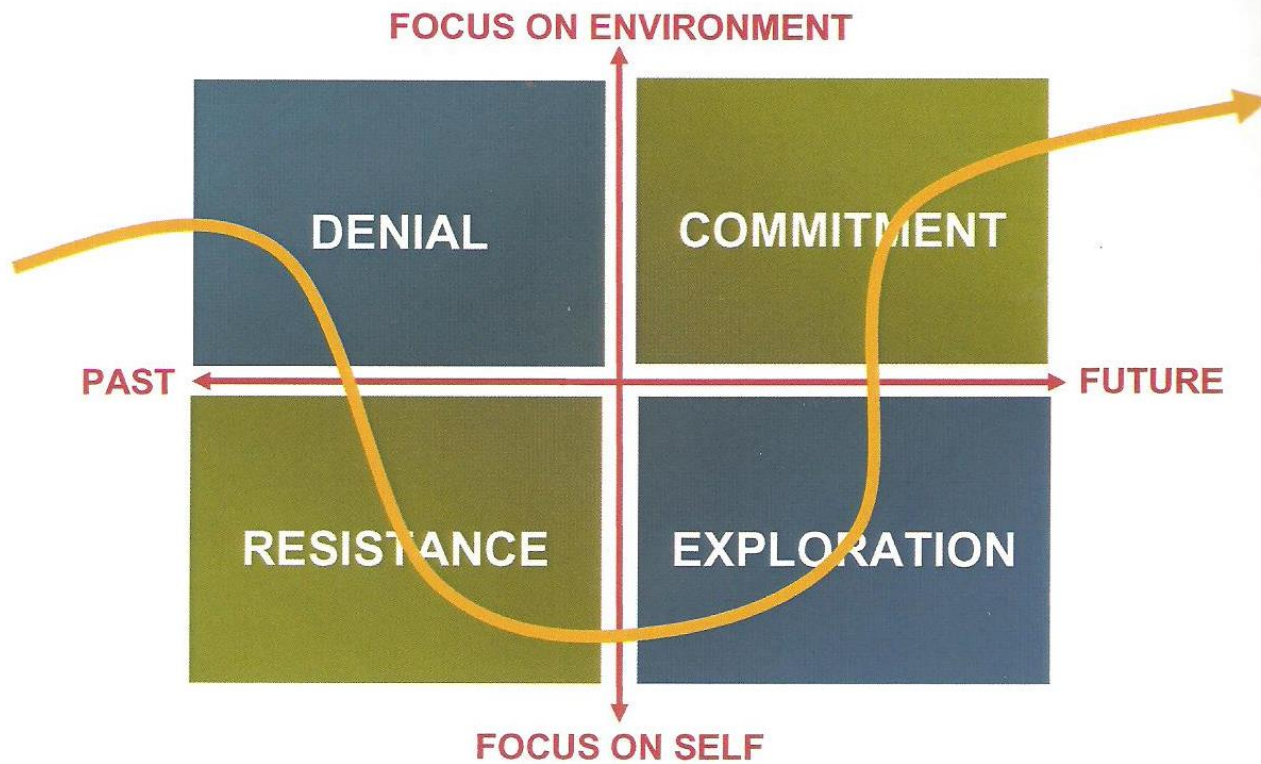
Success rates

- 67% of corporate change efforts in Australia suffer a major setback that prevents the change from being implemented (Turner and Crawford in Simons 1999).
- Re-engineering efforts have about 33% chance of success
- Quality improvements have about 50% change of success
- New software applications about 20%.



Change Process

THE TRANSITION CURVE



National Foods Transitional Leadership Training 2007

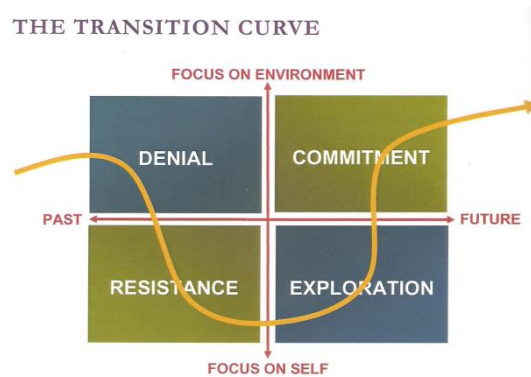


Resistance to Change

Destructive
e.g. perceived
increased workload



Constructive
e.g. improved
workload



- Research into Resistance to Change in general manufacturing identified that effects on workload and the attitude of others may result in destructive resistance in manufacturing (Waddell & Sohal 1999) .



Resistance to Environmental Change

- 2001 Masters Env Sc.study looking at resistance to environmental change in dairy manufacturing assessed at factory and head office:
 - Likelihood of change
 - Effects on workload
 - Effects on workflow
 - Effects on tangibles and non-tangibles
 - Job security
 - Personal feelings
 - Anticipated reaction of others (organisational culture)
 - Personal judgement (good/bad)
 - Availability of information
 - Apathy

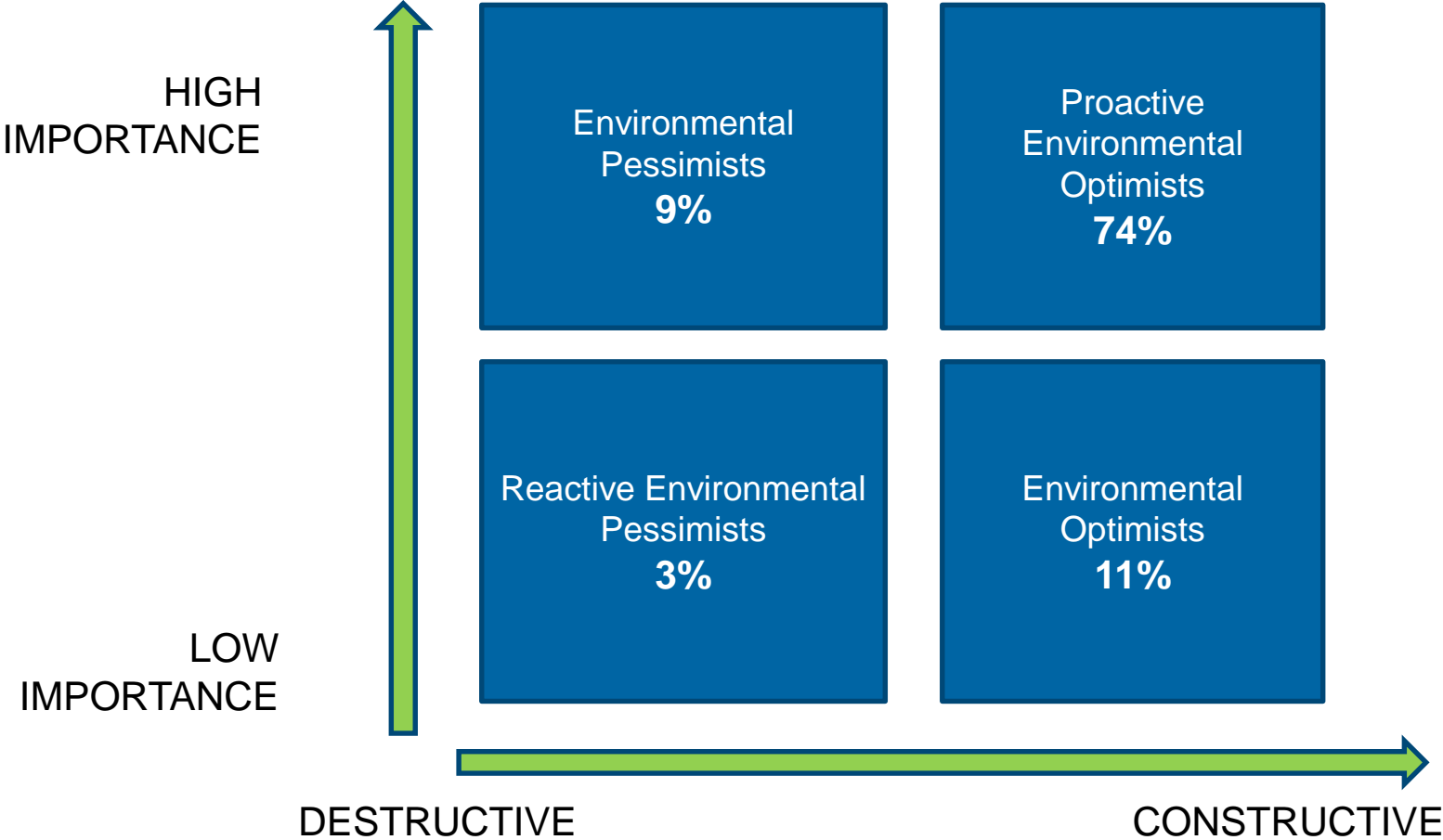


Resistance to Environmental Change - Findings

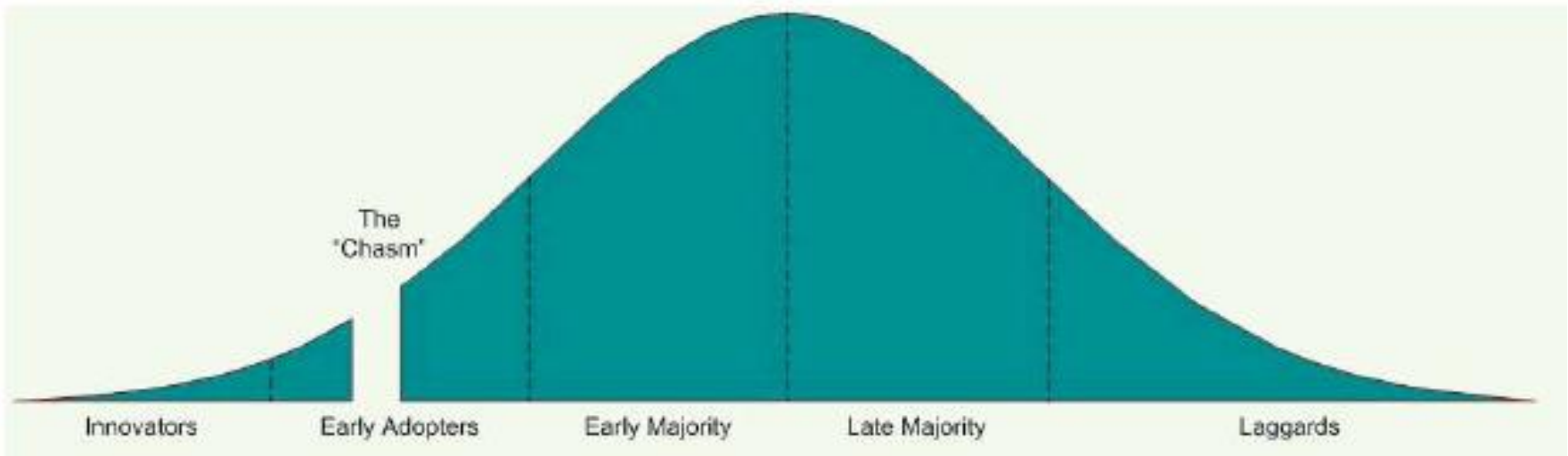
- Majority of destructive resistance was identified re impact on workload
- Survey respondents (factory and head office) were positive about perceived impacts on job security and effect on intangibles.
- Respondents thought there was a certainty of change and generally judged as good.
- Difference between factory and head office management
 - Factory more “destructive resistance” about workload,
 - Head office more about workflow and attitude of others.
- Very small number apathetic
- Overall “constructive resistance” prevailed



Resistance to Environmental Change



Organisational Attitude Bell Curve



Geoffrey Moore "Crossing the Chasm"



Behavioural Change



<http://leftfootforward.org>

Recognition that a large number of environmental and sustainability issues are behavioural based (i.e. rely on people changing their behaviour).

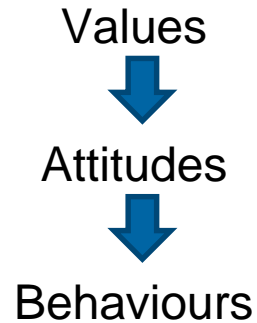
A behavioural change program is a targeted step by step process focussed on “transformational change” and works with resistance to the change.

Endless behavioural change theories and models to guide the development of successful change



Theories for successful environmental change

- Do green values and attitudes translate into environmental behaviours?*



Research and survey results suggests not.



Survey Findings

- Energy Australia surveys of willingness to pay for green energy (65%) whilst actual willingness to purchase green energy was more like (<2%)
- National Marketing Institute in Pennsylvania (2002) analysed that 80% consumers were concerned with environment and stated renewable energy was important ...but only 7% actually purchased renewable energy
- National Geographic Greendex 2014 - reports the rate of change in adopting environmentally sustainable behaviours is not in proportion is far slower than the increased environmental issues and concerns in Countries.

Reasons ?

- Convenience, workload, cost , social norms ??



Actual Model

Convenience



Behaviour



Attitudes

Increasingly, those who develop and deliver programs to promote health and sustainability are turning to community-based social marketing for assistance

Community Based Social Marketing (CBSM)

<http://www.cbsm.com/public/world.lasso>



5 Steps for Implementing an Environmental Behavioural Change Program (CBSM)

1. Identified the desired behaviour to change
 - Specific, Measurable, Desirable, Doable
2. Identify the Barriers (action specific) and benefits
 - Perceptions of difficulty
 - Convenience
 - Cost
 - Workload/workflow
 - Attitude of others (support of management)
 - Rewards/incentives
3. Developing and Piloting a Program – communication, prompts, commitment, incentives, norm appeals, trusted others, no surprises
4. Implement across a community
5. Evaluate – what changes have occurred, what's working, what's not



Energy Challenge Case Study - 2010

1. Identify the specific behaviour to change

- Electricity consumption reduction target of 10% over 12 months
- A list of specific behavioural changes were developed and a new focus was promoted and encouraged every 2 weeks (specific behaviours for agreed length of time)

2. Understand barriers (resistance) and incentives

- Early consultation to identify barriers (resistance) and built into program design
- Voluntary but welcomed and encouraged by providing some incentive for participation and reward for reaching target
- Competitive nature of a fire station was encouraged
- Reward \$1000 was based on the expected dollar savings



Energy Challenge Case Study -2010

3. Implement as small manageable group

- Trialled at 4 fire stations
- Agreed commitment by all participants
 - 10 % reduction target agreed as achievable
 - commitment was formalised via a launch
 - Volunteer “champions” across all shifts
 - Prompts



4. Providing immediate feedback and evaluating success

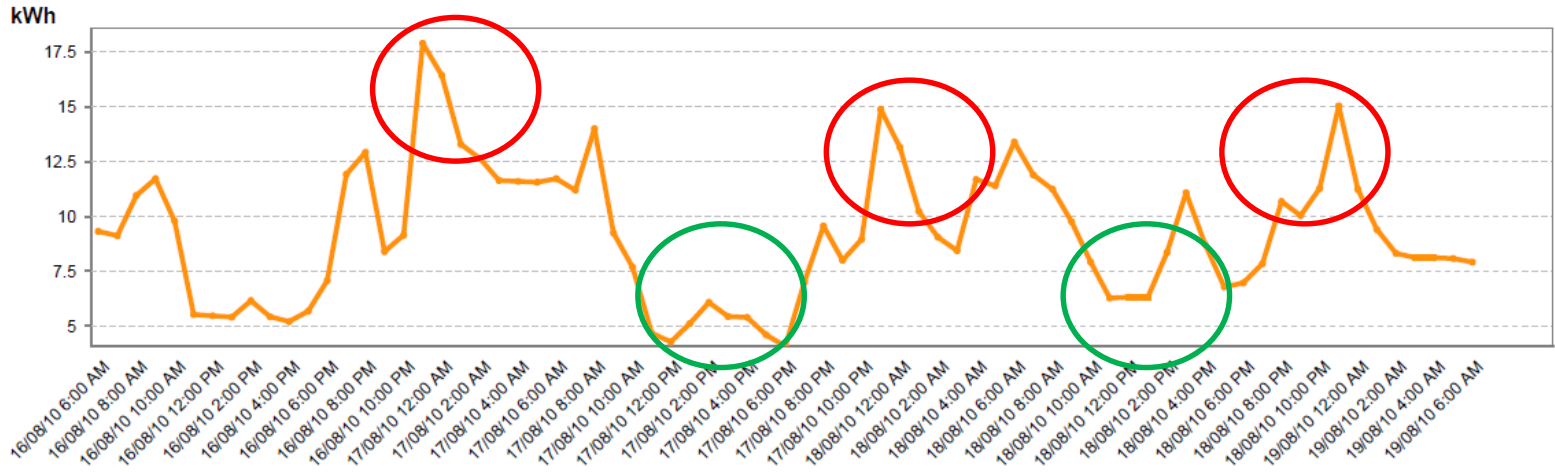
- Regular resource monitoring reports provided
- Access to reporting by participants
- Making it visual –noticeboards, prompts
- Business communication on progress



Regular Tracking and Feedback



Electricity



● Electricity



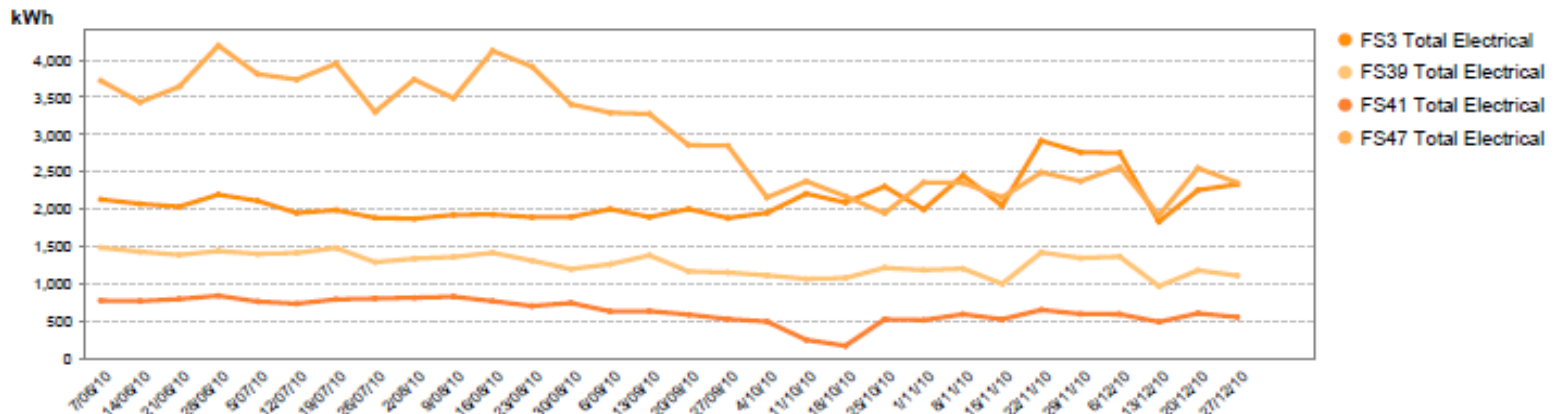
Meter Report Multiple Meters

Consumption



Organisation Metropolitan Fire and Emergency Services Board
 Node *Energy Challenge [Billing meter]
 Path *Energy Challenge

Start date 7/06/10 12:00 AM
 End date 3/01/11 12:00 AM
 Resolution weekly



Date	Electricity kWh	FS3 Total Electrical kWh	FS39 Total Electrical kWh	FS41 Total Electrical kWh	FS47 Total Electrical kWh
1 7/06/10	8,125.06	2,134.55	1,488.72	780.18	3,721.61
2 14/06/10	7,716.57	2,074.24	1,434.12	773.13	3,435.08
3 21/06/10	7,870.07	2,036.67	1,391.84	801.05	3,640.51
4 28/06/10	8,677.44	2,197.69	1,442.88	845.65	4,191.22
5 5/07/10	8,096.57	2,114.28	1,405.52	767.27	3,809.50
6 12/07/10	7,846.19	1,952.56	1,417.20	739.27	3,737.16
7 19/07/10	8,222.10	1,990.96	1,485.21	797.03	3,948.90
8 26/07/10	7,293.48	1,886.96	1,294.31	808.61	3,303.60
9 2/08/10	7,775.87	1,876.52	1,342.36	819.18	3,737.81
10 9/08/10	7,612.76	1,926.84	1,364.52	833.37	3,488.03
11 16/08/10	8,246.09	1,932.92	1,419.23	773.16	4,120.78
12 23/08/10	7,830.41	1,895.95	1,315.29	708.53	3,910.64
13 30/08/10	7,258.14	1,900.65	1,203.44	748.19	3,405.86
14 6/09/10	7,198.28	2,002.28	1,266.56	635.72	3,293.72
15 13/09/10	7,199.65	1,898.76	1,385.28	639.69	3,275.92
16 20/09/10	6,629.82	2,005.24	1,172.36	593.36	2,858.86
17 27/09/10	6,425.03	1,884.84	1,155.84	532.75	2,851.60
18 4/10/10	5,731.55	1,954.40	1,117.40	499.88	2,159.87
19 11/10/10	5,911.59	2,210.31	1,070.76	254.95	2,375.57



Energy Challenge Pilot Results

- Overall 8% reduction in energy use at the four stations over 12 months
- Two stations exceeded the 10% reduction target
- All four stations reduced their energy consumption while the average for remaining fire station portfolio increased by 1%
- Identify ongoing barriers to behavioural changes ...many were opportunities for other facility improvements
- Requires ongoing support and attention
- A follow up program was undertaken over 4 months in 2012 with 4 fire stations – they achieving an average of 15% reduction in power consumption.



Behavioural Change Program Alternatives

	Energy Challenge Program 4 fire stations	Solar Hot Water 4 stations	10 % GreenPower 4 stations
Energy Reduction	Ongoing savings per year	Ongoing savings per year	None
CO ₂ savings per year	38.6 tonnes	9.2 tonnes	47.9 tonnes *
Renewable Energy	No	Yes	Yes
Engagement	engaged participants become future ambassadors	None	None
Costs	Initial project setup and rewards	High capital purchase and installation costs	Annual - recurring costs
Resources	Part time coordination	Short term project management	None – easy to implement
Payback	2.1 years	>10 years	None



Using the framework and tools elsewhere

Developing and implementing environmental strategiesor developing and implementing management systems.

- find followers and alliances
- understand the real resistance and get help identify benefits incentives, rewards
- Consult a lot to develop a strategy – involve as equals find common goals make it convenient, less work rather than more etc.
- Focus of small steps to prove the concepts and get the majority support.
- Willingly participate (ledge/public)
- Regular feedback (two way) monitoring and tracking



Behavioural Change Programs

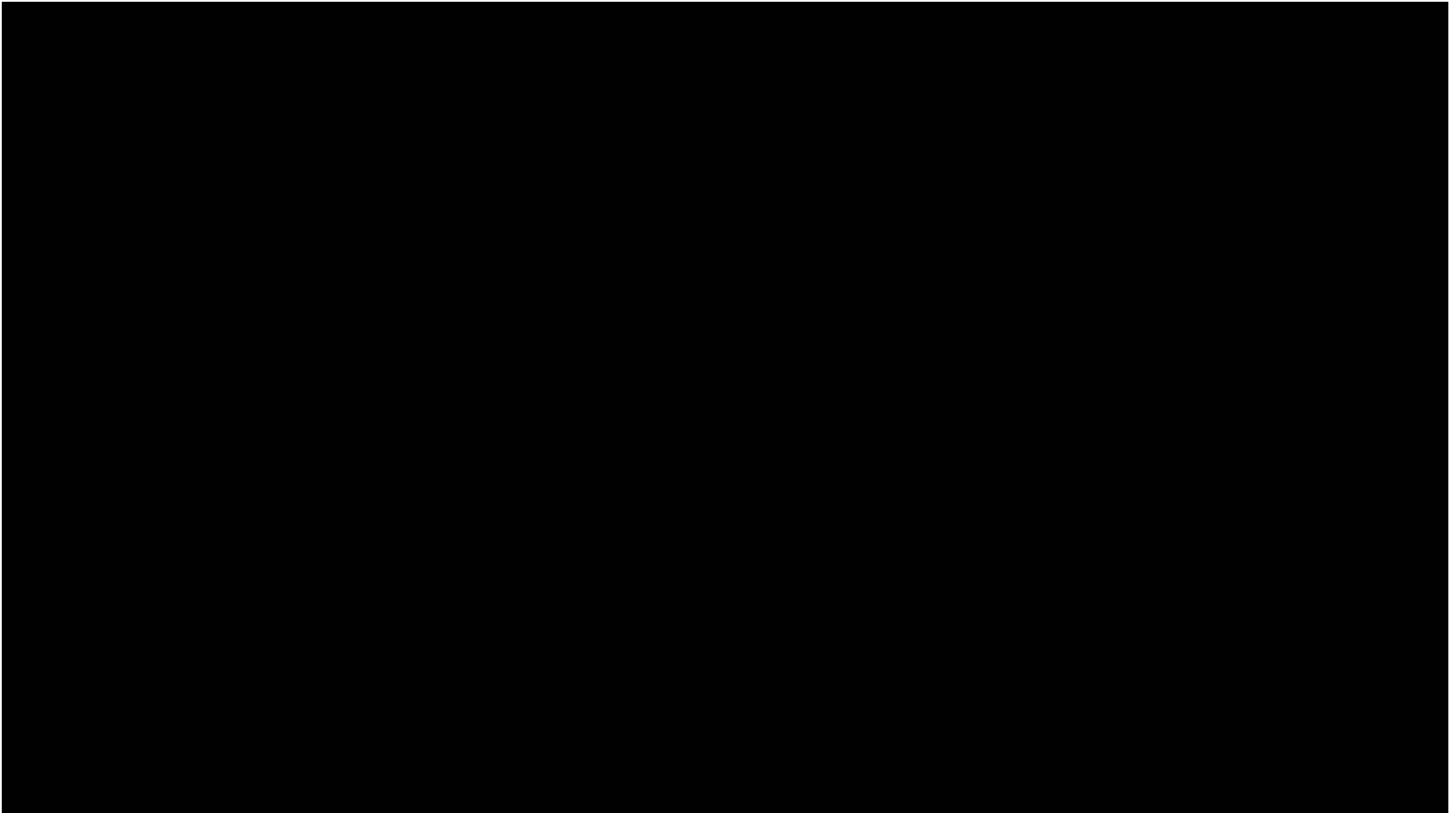


1. Articulating a vision of how things can be different ✓
2. Working with and motivating others ✓
3. Building alliances ✓
4. Taking risks in small steps ✓
5. Challenging the status quo ✓
6. Listening to criticism ✓
7. Getting out of our comfort zones ✓
8. Letting our passions show ✓
9. Understanding whole of business ✓
10. Politically savvy ✓

Requires more time effort and commitment (persistence) than \$'



Derek Sivers: How to make a movement



Summary



- Successful changes can be hard and failure rates high
- Majority of people are likely to be supportive
- Resistance to change needs to be understood and worked with - find your first followers.
- Planned behavioural change programs can be an effective method of making a difference and transforming “lone nuts” into leaders.
- CBSM Behavioural change program framework may be a great tool to apply elsewhere
- Any environmental professional can initiate, lead, support and facilitate these.





www.ghd.com