

Behaviour Change for Combating Climate Change

Created for the DEC Community Education Branch
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This document is a guide for designing climate change behaviour change programs. It sets out what doesn't work, what does work as well as a toolkit of strategies to foster long term behaviour change (based on social science research). The strategies presented in this guide are not limited to climate change and can be applied to other behaviour change programs.

What doesn't work

Pure information campaigns



Many behaviour change programs bombard participants with information. These programs fail to realise that research indicates that pure information campaigns have minimal effect on changing behaviour (i.e. having a high level of awareness of climate change does not necessarily translate into concern or taking personal action).

Information however is essential for communicating that a problem exists, that there is a practical solution, and to assist in identifying the costs of inaction and benefits of taking action. For example, if your audience believes climate change is attributed to ozone depletion, they may take inappropriate and/or ineffective actions (e.g. avoid aerosol sprays and blame chemical industries). Audiences become engaged and feel a sense of urgency when they gain a good understanding of the science of climate change. Information must therefore be combined with other practical strategies to be effective.

Monetary rewards



There is a belief that you can change behaviours by showing people how their actions can save or earn them money. Research suggests that this idea is overrated and alone may not lead to behaviour change.

Telling people what to do



Think of a time someone told you what to do. How did you react? You probably didn't like it much. For this reason we must avoid telling an audience what to do at all costs. It is far more effective for people to request information and voluntarily change their behaviour.

Poorly targeted programs

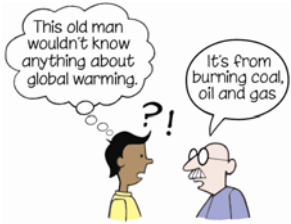


If you are trying to close down a coal fired power plant, would you speak to a group of pre-school children? What about a group of climate sceptics? It is important to target your program at the right audience to obtain the desired behaviour change.

What works

Your target audience

Give up your assumptions



Behaviour change expert Les Robinson suggests that before you begin designing a program for your target audience “Give up everything you think you know about them [your audience]”.

Example: The staff at the Environmental Services Department in San Diego ran a campaign with a theme of being a “good community neighbour” in an attempt to reduce pollution emitted by various businesses. This approach failed to engage a business minded community. It was not until the department changed their communication strategy to include saving money by reducing pollution that businesses became interested in taking action.

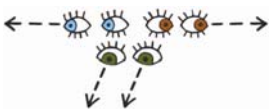
Get to know them



You will need to research your audience to work effectively with them. Find out about their responsibilities, aspirations, values, behaviours, what they are unhappy about, the obstacles they face, how they perceive climate change and what they feel confident and not so confident doing. Conducting surveys or informal focus groups are some ways in which you can achieve this.

Example: Reverend Sally Bingham states “*We must be aware of the needs and concerns of the community to which we are speaking*”. Before delivering a presentation to an African-American Baptist church in a poor neighbourhood, she was made aware that the community was not very receptive to global warming but would respond well to saving money. Subsequently, she held up the power bill of a nearby congregation and showed the audience how much this particular congregation had saved over a year as a result of being more energy efficient. The audience instantly saw the connection between ‘saving energy, saving money and saving the planet’ and were keen to take action themselves.

Look beyond the converts



It is important to engage people who are not taking appropriate action (whether they are concerned or not about climate change). Consider targeting people who have above average electricity consumption, are driving SUVs, frequently fly abroad and don’t consider themselves to be ‘green’. Whilst you may experience some discomfort in the process, these people need to be engaged if your program is to be a success.

Does this mean we should ignore the converts? No. Converts practising a low impact lifestyle may still be engaged by acting as role models and sharing their personal experiences with others.

Engage your audience

Social forces - Face to face contact



Social forces are very powerful in creating behaviour change. Research suggests that interactions with respected peers, such as colleagues, friends and family members, triggered voluntary change in 64% to 75% of people as opposed to 29% that was triggered by information only.¹ Social forces (particularly face to face communications and telephone calls) are therefore immensely powerful and play a major role in influencing attitudes and behaviour.

Example: A community action project found households lowered their hot water thermostat when they received a phone call inviting them to do so. Households that only received a step by step guide in the mail did not perform this action.²

Emotional Appeals



Emotions can be powerful motivators as well as de-motivators for behaviour change. For this reason, the emotional reaction of your audience must be carefully considered when crafting an effective communication. Studies have found that certain strong emotional responses, such as massive fear, despair and complete overwhelm, can end all further thinking about climate change. In addition making people feel manipulated or guilty will often provoke strong resistance. It is therefore important to be extremely cautious when playing with negative emotional appeals.

It has been suggested that evoking empathy, using positive motivations and forms of communication with audiences will make them pay more attention. Empathy can be triggered in your audience through telling a moving, personal story or displaying a powerful visual of humans and animals in danger of climate change. The reasoning for this is that many people can easily empathise with humans and animals but have greater difficulty empathising with non living things such as landscapes.

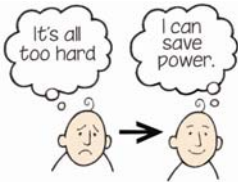
Create visual images

Example: Researchers trained a group of home energy auditors in presenting information in a visual manner.³ The usual practice for these auditors was to provide households with basic feedback regarding the lack of insulation, cracks around windows and doors, etc. When the auditors presented the same information in a visual manner (see below) a better response was received.

Auditor: “If you were to add up all the cracks around and under these doors here, you’d have a hole equivalent to the size of a football in your living room wall. Think for a moment about the heat that would escape from a hole that size.”

Similarly, when discussing the threats of climate change make sure they are easy for the audience to visualise. People are more concerned about threats that can be easily imagined and often discount threats that are too general or distant (e.g. rising sea levels). Using visuals wherever possible (e.g. props and images) can help to avoid this problem.

Overcome mental barriers



“If everyone knows about it, surely someone will do something about it?” and “I won’t do anything until others start taking action” are examples of mental barriers that stop people from personally acting to address climate change. Barriers such as these should be acknowledged and explicitly addressed to help the audience move forward. Barriers may be broken down through peer pressure, empowering the audience, offering social support and modelling the desired behaviour.

Keep it personal



If I’m living it up on the coast in Western Australia, why should I really be concerned about sea levels rising in Bangladesh? Audiences want to know how climate change relates to them. Wherever possible show the audience how this issue will affect them, their children, their house, their pocket, their leisure activities, their street, their region, their country, etc.

Evoke a future worth fighting for



Evoke a future life in your audiences’ minds that is more satisfying, healthy and desirable than their current circumstances. ‘Doomsday’ campaigns will therefore not be as effective as ones that highlight the many positive efforts underway and allow people to imagine a brighter future. Political and community leadership is also needed to help convey to your audience that this future is possible.

Communication

Choosing a credible and respected speaker



The credibility and respectability of the speaker is more important than the content presented. If your audience has no awareness of climate change, then they will decide what they think is true and false based on what they think of the speaker. The audience must trust the speaker and see them as someone worth listening too before they will hear what they are actually saying.

Who should you pick as a speaker? A scientist? A celebrity? It all comes down to your target audience and whom they respect and perceive as credible.

Scientists (particularly climatologists) are important and have their place. They have authority and it is reassuring that they understand the complex

nature of climate change. One drawback however is it is hard for many people to connect with scientists.

That is when likeable intermediaries (e.g. celebrities) come into the picture. These popular, respected individuals act to translate the scientific information into simple, everyday language and advice. Using celebrities has the power to influence the attitudes of audiences that aspire to be like them.

Example: A health worker was given the job of encouraging families in a Peruvian village to boil their water before consumption. After two years of intensive effort in the village, only 11 of 200 families had adopted this behaviour. The resistance to change was found to be partly due to the villagers seeing the health worker as a “snooper” and someone trying to “pry for dirt and to press already harassed housewives into keeping cleaner homes”. It would be expected that had a locally respected person been chosen to advocate the message more villagers would have adopted the new practice.

Use a credible source of information

Similarly, when selecting information to use make sure it comes from a credible source. The more credible the organisation delivering the information, the more influence this will have on the audience.

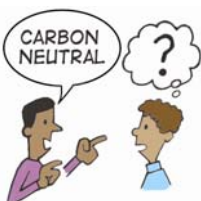
Example: Researchers sent two groups of homes identical pamphlets on energy conservation. One group received the pamphlet in an envelope from the State Regulatory Agency, whilst the other received the pamphlet in an envelope from a local energy company. Research conducted previously indicated that the State Regulatory Agency was seen as more credible than the local energy company. Despite the information in the pamphlets being exactly the same, it was found that households who received the pamphlet from the State Regulatory Agency carried out more of the recommended changes than did the householders who received the pamphlet from the local energy company.

Balancing act between the problems and solutions



When you look at the language used to describe the challenge of climate change it is often described as enormous and apocalyptic. The solutions however are presented as small, cheap and easy (e.g. change a light bulb). Considering the scale of the problem, one cannot help but think “Will these small actions really be enough?” To avoid your audience falling into this mindset, the size of the solution has to be as big as the size of the challenge. Climate change programs will be most effective if they address (in addition to the smaller easy actions) the big steps people and organisations can take to reduce emissions such as downsizing car fleets, installing solar hot water heaters and cutting back on air travel.

Language



If your audience is unaware of climate change then using terms such as 'carbon neutral' or 'carbon negative' (that require a more in-depth knowledge) are likely to confuse them and put them off your program. It is important to speak your audience's language. As a general rule of thumb, use plain English.

The message

One or two sided?



Every issue has more than one side. Whether you choose to present a one sided or two sided message depends on your audience. To assist in deciding you must first find out what the audience's level of understanding of climate change is. If the audience is aware of both sides, the message should present both sides to appear credible. If the audience is not aware of the issue, then the message will be more persuasive if it is one sided.

Be clear and specific



If your program is suggesting certain behaviours (e.g. installing solar panels) then you need to show the audience where they need to start. Programs that clearly show participants each of the specific steps involved in engaging in the behaviour are more likely to be successful. Tailored clear, direct, specific directions work best.

Focus on the losses

A decision must be made on whether to focus on the benefits of engaging in a particular sustainable behaviour or the losses people are suffering as a result of their current unsustainable behaviour. Research suggests that messages which emphasise the losses are consistently more persuasive than messages which emphasise savings as a result of taking action.

Empower rather than threaten



By using threatening messages to communicate about climate change you run the risk of your audience switching off and avoiding thinking about it altogether. Threatening messages can still be used but are more likely to be persuasive and trigger change when:

- People feel personally vulnerable to the risk
- They are combined with useful and very specific information about the actions people can take against the threat
- People believe they have the ability to take action
- The suggested action is seen as an effective solution to the problem
- The cost associated with taking action is seen as low or acceptable
- The reward for not taking action is seen as unappealing

- People consciously and carefully think about the threatening information

Example: Threatening smoking advertisements can teach us a lot about effective climate change communication. A study exposing smokers to advertisements with the basic message of ‘Smoking kills’ found the advertisements **did not** motivate smokers to quit smoking.⁴ Many smokers became defensive, rejected the message, referred to articles that suggested smoking doesn’t kill you and some became so stressed they needed to have a cigarette during the advertisement.

Experiences rather than data



Why is it that a cancer hotline is inundated with calls when a famous person is diagnosed, but not when a medical report is released? Research suggests that visual and concrete personal stories carry more weight with most audiences than dry scientific facts or data.

Example: In 2004, an international consortium of researchers released the Arctic Climate Impact Assessment report, outlining the impacts of climate change on the Arctic.⁵ To enhance the effectiveness of the message a range of photographs, graphics and personal stories from people affected by climate change accompanied the report and were made available. An example of this was a quote from a hunter in Alaska who said “*Our community has seen real and dramatic effects as a result of the warming that is occurring in the arctic environment. In the springtime, we are seeing the ice disappearing faster, which reduces our hunting time for walrus, seals and whales*”. The media utilised these images and personal experiences alongside the report to enhance the impact on audiences.

Removing external barriers



Example: The city of Boulder, Colorado, created a goal to decrease motor vehicle dependency. Subsequently, bike racks were provided on all buses, bike signage was installed (e.g. “Do not pass” and “One way”) and over 69 miles of bike paths and lanes were created. Making these infrastructure changes helped to remove barriers that existed for many people and allowed them to more easily engage in the desired behaviour.

People need extra support to overcome obstacles and engage in sustainable behaviours. Whether it is providing recycling collection or child care services at a series of evening workshops, these are some of the big picture, practical issues that must be considered when designing climate change programs.

Facilitating the Rapid Adoption of New Ideas and Behaviours

Audiences are more likely to rapidly adopt sustainable behaviours if the principles below are followed:



- **Observability:** People can see the results and benefits of the behaviour.

Example: An individual replaces several old incandescent light bulbs with energy efficient light bulbs. Following this action he or she can see a noticeable reduction in energy use on their power bill.

- **Trialability:** People can test out new behaviours in a safe environment.

Example: All public transport was made free in Western Australia to celebrate the opening of a new train line (Mandurah train line). Western Australians had an opportunity to trial public transport for one day.

- **Simplicity:** People can easily understand and adopt the behaviour.



Example: A workplace has two different waste bins clearly labelled to indicate what workers may or may not place inside each bin.

- **Compatibility:** The behaviour is consistent with the existing values and norms of the society (i.e. it fits easily into an individual's lifestyle).

Example: Instead of telling an audience who loves to shop to 'Consume less', a speaker encourages the audience to 'Consume differently' (i.e. to purchase specific high-energy gadgets instead of low energy gadgets).

- **Relative advantage:** The behaviour is perceived as better than others in regards to satisfaction, economic terms, social prestige and convenience.



Example: In Keene, New Hampshire, the cities for climate change protection committee set up booths to sell energy efficient light bulbs at a heavily subsidized rate. It was explained to passers-by that the bulbs would last seven times as long as regular light bulbs and save money over time.

When developing a program, consider how you can apply as many of these principles as possible to the behaviours you are addressing.

Behaviour Change Toolkit

Once you have your audience engaged there are a number of effective tools you can use to encourage behaviour change to occur (see below).

Commitment



A commitment is an oral or written pledge or promise to change a specific behaviour. The act of committing to a particular action appears to alter one's attitude on the topic and the way in which they view themselves.

Example: One study used this strategy to promote gas and electricity conservation among households.⁶ Findings revealed participants who were asked to sign a public commitment that was published in a leaflet used less gas and electricity than those who made private commitments or no commitment at all.

Effective Commitments	Ineffective Commitments
People freely volunteer to make the commitment	They are made one on one
They are written down rather than being verbally made	They are made only on an internet site
They are made publicly and witnessed by the individual's peer group (e.g. published in a newspaper)	They are made to yourself
They are made by a group of highly connected people (i.e. a church group)	

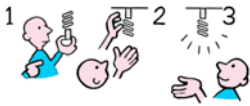
Prompts



How many times have you gone shopping and left your green bags in the car or at home? The problem wasn't that you lacked motivation, but your memory failed you. Prompts are a simple strategy to help individuals remember to perform specific actions such as turning off a light, recycling paper and taking shorter showers.

For prompts to be effective they should:

- be eye-catching
- be self explanatory (contain a simple picture and/or text that explains what the person needs to do)
- be placed close to where the desired behaviour is to occur
- encourage people to engage in positive behaviour (rather than telling them to avoid environmentally harmful behaviours)
- be combined with a commitment strategy to help people act on the prompt



Modelling

Example: Researchers placed a sign in a male athletics shower room.⁷ The sign stated the following:

Conserve water: 1. Wet down, 2. Water off, 3. Soap, 4. Rinse

This sign appeared to have minimal effect on changing male athletes' behaviour.

The researchers then tried a different approach by getting an accomplice to pretend to shower in the athletics room. Whenever a student entered, the accomplice turned off the shower, soaped up and then turned on the shower again to rinse off. Modelling the water conservation behaviour resulted in the number of students who turned the water off to soap up increasing to 49%. This figure rose to 67% when two students modelled the behaviour.

The example above illustrates that humans learn best by watching the behaviour of others. The adoption of sustainable behaviours can be increased through simple, step by step demonstrations of sustainable behaviours either in person, through television or via DVD/video.

Feedback



Feedback helps to reduce audience members' anxiety, provides reinforcement, and gives participants an opportunity to see if they are moving in the right direction and/or ways they can improve. This strategy works best when it is given frequently and follows the behaviour as closely as possible.

Example: To empower participants and give them a sense that they were not alone, the 'GREENhouses' program provided audience members with regular feedback on their energy savings with monthly newsletters and visits from a project officer.

Rewards

Any behaviour that is followed by a reward is more likely to occur again. Rewards not only help to foster sustainable behaviours however also provide motivation for engaging in particular behaviours.

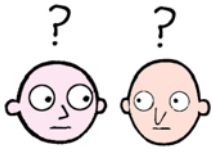
Rewards are most effective when they are:

- used to reward people immediately after engaging in particular eco-friendly behaviours and/or achieving their goals
- individualised
- made visible

Rewards do not have to be material objects (e.g. money, food and stickers). Some people will find it just as rewarding receiving a compliment or some praise.



Social norms



When a new idea arrives, most people look to others (particularly higher status peers) for guidance and clues on how to behave. When they do this they are looking to see what the social norm is.

Social norms teach us how most people around us behave and also alert us to what is punished and sanctioned in society. According to Psychology Professor P. Wesley Schultz “*Norms are a powerful tool for conservation. No one wants to be the sucker, conserving and using less when their neighbours aren’t*”.

Example: Campaigns against 4x4 vehicles have made use of influencing social norms. Solitaire Townsend (co-founder of Futerra) states, “*if a big 4x4 is such an embarrassment that their kids don’t want to be dropped off at school in it, then that’s a success for us. You can’t stop people wanting status symbols, but you can make them aspire to different ones*”.

Norms can be effectively used in a program by:

- involving people who the audience perceive as high status individuals
- increasing the status of people who already exhibit the sustainable behaviour (This can be achieved by featuring them in news stories, giving them prizes and awards)
- making the norm noticeable (e.g. publicly modeling the desired behaviour)

Social diffusion



Example: In the 1930’s American and Canadian farmers were losing large quantities of topsoil from their fields. To tackle this problem the U.S. government tried two different approaches. In the first approach, a pamphlet outlining the problem and alternative farming practices was distributed to a large group of farmers. Not surprisingly, this pure information campaign was ineffective.

The second approach involved targeting a small group of farmers. These farmers received direct assistance in adopting practices that would slow erosion. Neighbouring farmers saw the changes these farmers had made, engaged in conversation about them and subsequently, adopted similar practices once they saw the results. This small group of selected farmers appeared to have a ripple effect throughout the entire farming community.

Just like the farmers, many of us adopt environmentally responsible behaviours due to friends, family or colleagues introducing us to these behaviours. This process is called social diffusion.

Goal setting/Targets



Research indicates that providing goals or targets for individuals, households or communities to work towards is effective in changing behaviour. A goal ideally includes the steps to get there and the chosen timeframe. A supporting strategy also needs to be developed to reach long term goals or take large steps. Goal setting is most effective when coupled with feedback or forms part of a commitment strategy (e.g. to conserve a certain amount of energy).

Example: A study combined goal setting in combination with feedback to reduce the amount of energy used in doing the laundry.⁸ Participants who set goals and received immediate feedback on the average amount of energy (kWh) used per wash saved more energy than participants who did not set a goal and received only feedback.

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