FLOWER

The **F**ramework For **Lo**ng-Term, **W**hole-System, **E**quity-Based **R**eflection

August 2015 • Elizabeth Sawin

Food & Water

Resilience

Jobs & Assets

Long term benefit (climate, ecosystems)

Energy Industry & Mobility

Health, Well Being & Safety

Connection

Multisolving

Multisolving is the search for systemic solutions that protect the climate while also improving areas such as resilience, equality, health, and well-being. Multisolving is motivated by a search for justice and for solutions that solve rather than exacerbate other existing problems. This makes multisolving strategic, because solutions discovered via multisolving are the most likely to have broad political support and are the least likely to create new, unanticipated problems.

FLOWER

FLOWER is a visual framework first developed to help us, as researchers, categorize examples of multisolving. Then we started using it as a tool for teaching and communicating, because it gave us a shorthand to show audiences which co-benefits might come with a given climate response. It was also useful because it reminded us to ask not only what benefits might accrue with a given solution, but also how those benefits would be distributed.
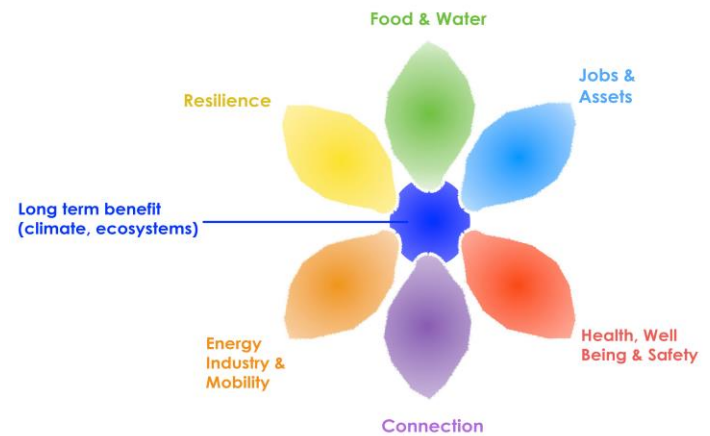
After using FLOWER for a while, we noticed that it helped people think critically about their own strategies and visions. It helped people explore the vast array of climate solutions that have the power to help protect the climate AND create a better world.

We learned that FLOWER provided a way to open the conversation about strategies and whether there were provisions to make sure the co-benefits of climate action would be fairly shared among groups within a community.

This short guide to FLOWER is meant to provide you with an introduction so that FLOWER can be useful in your own hands. What follows are loose guidelines, so please make FLOWER your own. Use it to facilitate your most important conversations about how to address climate change in ways that build a better world, and let us know what you discover at info@climateinteractive.org

## The Center of FLOWER – Long-Term Climate Protection
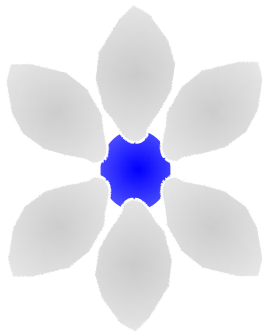
The center of the FLOWER diagram represents the long-term, global benefits of the investment or strategy being considered. Shading in this part of the diagram represents strategies that reduce CO_2 or other greenhouse gas emissions, such as methane or nitrous oxide, and actions that boost the carbon-sequestering potential of ecosystems.

The Petals of FLOWER – Immediate, Local Benefits

As we looked at examples of climate multisolving, we found that the co-benefits could be grouped into six categories.
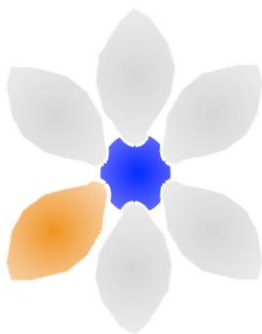
Energy Industry & Mobility

Shading this petal means the investment or strategy brings people secure access to energy, the ability to make things they need, and the ability to get around. From bringing small scale photovoltaic energy to remote villages in developing countries to providing public transportation access that helps people get to work and school, some investments that reduce emissions also deliver the benefits of access to reliable energy sources.

Resilience

Some investments build people's capacity to survive or even thrive in the face of disruption. A subset of the investments that will protect the climate in the long-term can also help communities adapt to unavoidable climate change in the near-term. For example, conservation of wetlands can sequester carbon and help prevent flooding. Investments in renewable energy infrastructure can build resilience by diversifying the energy mix.
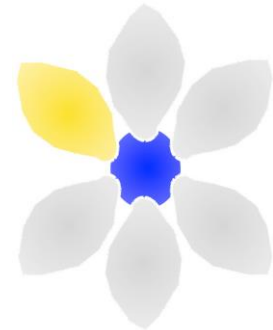
Food & Water

If this petal is shaded, it means that the investment or strategy being examined increases access to healthy food and clean water. Projects that restore degraded lands or create urban farms would show a benefit in this petal, as would water efficiency programs or land conservation programs, which increase nature's power to purify and filter water.
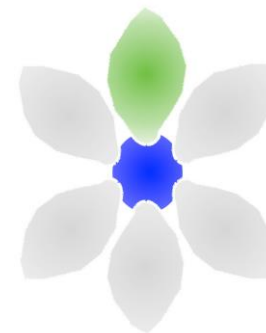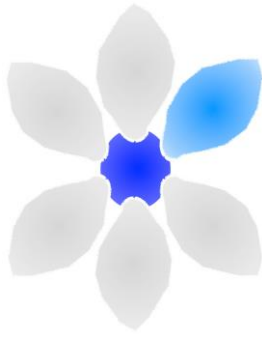
Jobs & Assets

The investments represented by this petal provide meaningful work at a living wage and build assets in a community. Energy efficiency retrofits or renewable energy infrastructure installations that provide good jobs are examples of the types of investment that produce these co-benefits.
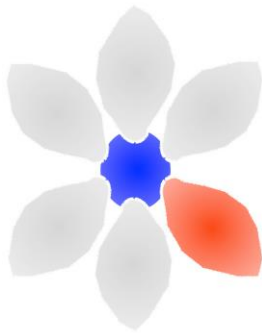
Health, Well-Being & Safety

Shading in this petal indicates that an investment improves mental, physical, and emotional well-being and creates safe conditions to live and work. Investments that make communities more walkable or bike-able or any policies that reduce the impacts of dirty energy on air quality are good examples of the possibilities in this petal.
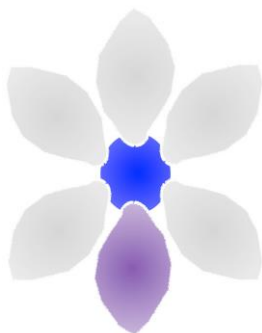
Connection

This petal is about the powerful mindset needed for human survival on a planet fraught with environmental challenges, war, and injustice. Shading of this petal means that a project or investment leaves the people who encounter it feeling more connected to their own sense of unique potential, to the needs and humanity of other people, and to the living systems human beings are embedded in. For example, an urban garden might help a group of children understand that whatever is in the soil ends up in their own bodies, or a solar-energy cooperative might provide reason for members of a neighborhood to know and depend on each other more deeply. We decided that the ability of some multisolving solutions to engender a sense of connection was important enough to merit its own petal, because, we suspect that without a better understanding of the interconnection of our world, progress on all the other petals of FLOWER will be insufficient to create true sustainability or justice. Additionally, any increase in people's sense of connection can only increase the number and creativity of multisolvers on earth.

The Shading of the Petals – The Distribution of Benefits

While solutions that protect the climate have the potential to benefit everyone in a community equally or even to be targeted at groups that have historically been marginalized or disenfranchised, such distribution doesn't happen by default. In too many cases, the benefits of the transition to clean energy or other solutions to climate change bring

more wealth and benefits to already well-off groups of people, and marginalized groups are left bearing the risks.

To bring the issue of distribution of benefits into the forefront of thinking and strategy, the FLOWER diagram requires people to think about it by representing that distribution in the shading of the 'petals'.

There are three options for shading in a FLOWER diagram. Uniform shading means that, by and large, the benefit is shared equally amongst a community. If the benefit is targeted at marginalized groups (say a solar job training program for people without a high school diploma), the outer edge of the petal is shaded more intensely. If the benefit is concentrated in the hands of people who are already privileged (say for an electric vehicle incentive that is only available to those able to spend a significant sum on an expensive car), the petal is shaded more intensely in the center.

The distribution of benefit is determined independently for each type of benefit, and some strategies may provide equal distribution of one benefit, and unequal distribution of another. For example, a project to make a community more walkable might have provision to employ workers from a marginalized group (which would be shown by 'outline' shading, but the health benefits that result from increased opportunities for physical

activity might fall to everyone in the community, represented by even shading.

Putting it All Together - An Example

Energy efficient vehicles and more walkable communities are both strategies for reducing emissions from transportation. But the benefits beyond climate protection of the two strategies are quite different.
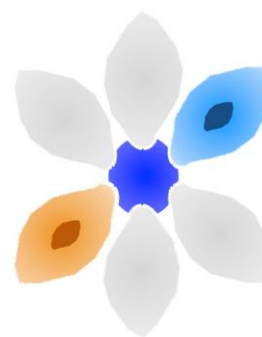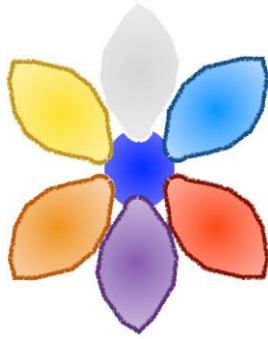

EFFICIENT VEHICLES

A strategy that protects the climate by promoting efficient vehicles provides a benefit in terms of energy and mobility, but that benefit is concentrated amongst people who are financially able to afford a car and who are eligible for a driver's license. Thus, the Energy Industry and Mobility petal is shaded for this strategy, and the shading is concentrated because not all people would benefit.

There are also some jobs associated with manufacturing of more efficient vehicles, but because these jobs would likely require specialized skills or access (say to a factory far from where the vehicles would be used), the shading in the Jobs and Assets petal is concentrated in the center.

WALKABLE COMMUNITIES

A strategy that creates infrastructure for walking and biking in a low income community has a climate protection benefit, just as the efficient vehicles scenario did, but this strategy would have a different set of co-benefits and thus a FLOWER diagram with a different appearance. In this case, the mobility benefit is available to everyone, especially low-income residents, not just to car owners (assuming the infrastructure is suitable for people with disabilities[1]). There might also be resilience benefits (for example, the community will be more resilient to gasoline supply chain interruptions such as were seen with Hurricane Sandy), and increased walkability of neighborhoods has been correlated with reductions in obesity and chronic disease. Jobs creating and caring for the new infrastructure of pedestrian walkways and bike paths are also more likely to be local and less likely to require extensive skills or education than the jobs associated with efficient vehicles. With policy elements such as local hiring provisions the benefits could be directed to low-income residents of the neighborhood. Because the infrastructure investment in this

strategy is aimed a low-income community, the benefits are targeted at more marginalized groups, as shown by the darker shading at the edges of the petals.

As people move about the community on foot, they are likely to become more connected to each other, to local shopkeepers, and perhaps to nature.

Seeing With New Eyes

There are always trade-offs between benefits and varying degrees of different benefits. FLOWER can't reduce those dilemmas for leaders or communities, but it can provide a visual aid and inspire better, more generative conversations. We hope that FLOWER will inspire you and those you work with to ask important questions about your work, including whether the strategies you invest in could produce additional benefits and whether your strategy can assure that the benefits it generates will be fairly shared.

At the very least, as we grapple with problems (both local and planetary) that have been created by ways of seeing the world that divide it into competing groups of people and disconnected chunks of nature, we hope FLOWER will contribute to making the world more whole, more healthy, and more fair.

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[1] One advantage of creating these diagrams is that they help you articulate what must be true for the benefit to accrue and be fairly distributed.