

CUTTING CO₂ IS A CHALLENGE WE ALL MUST FACE! SOLVE THE PUZZLE — ONE CUT WILL SUFFICE.

“FOLD-AND-CUT THEOREM”

Folding and making one straight cut suffice

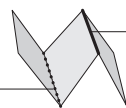
For any shape with straight edges there is a way to fold a piece of paper so that this shape can be cut out with a single straight cut.

Proved in 1998 by Anna Lubiw, Martin and Erik Demaine; first examples by Kan Chu Sen in Wakoku Chiyekurabe in 1721, Japan.

INSTRUCTIONS

Fold only along the thick solid and dashed lines until the shape collapses flat. Thick solid lines are ‘mountain’ folds, dashed lines are ‘valley’ folds. Once folded, make one straight cut along the thin line. Unfold.

VALLEY FOLD



MOUNTAIN FOLD

RESOURCES

Learn about the theorem:

erikdemaine.org

Download the puzzle PDF: bit.ly/onecutCO2

Short film with puzzle demonstrations:

Scan the QR code to watch a short film by **DILMAN DILA** (patreon.com/dilstories).





CUTTING YOUR CARBON FOOTPRINT— SOLVE THE “C” PUZZLE!

Your carbon footprint is an estimate of how much emissions you generate from various activities. Globally, on average, each person is responsible for 4.7 tonnes of CO2 per year, but this varies from 0.1 to 15 tonnes or more, depending on where in the world people live and what they do.

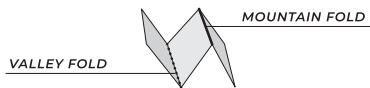
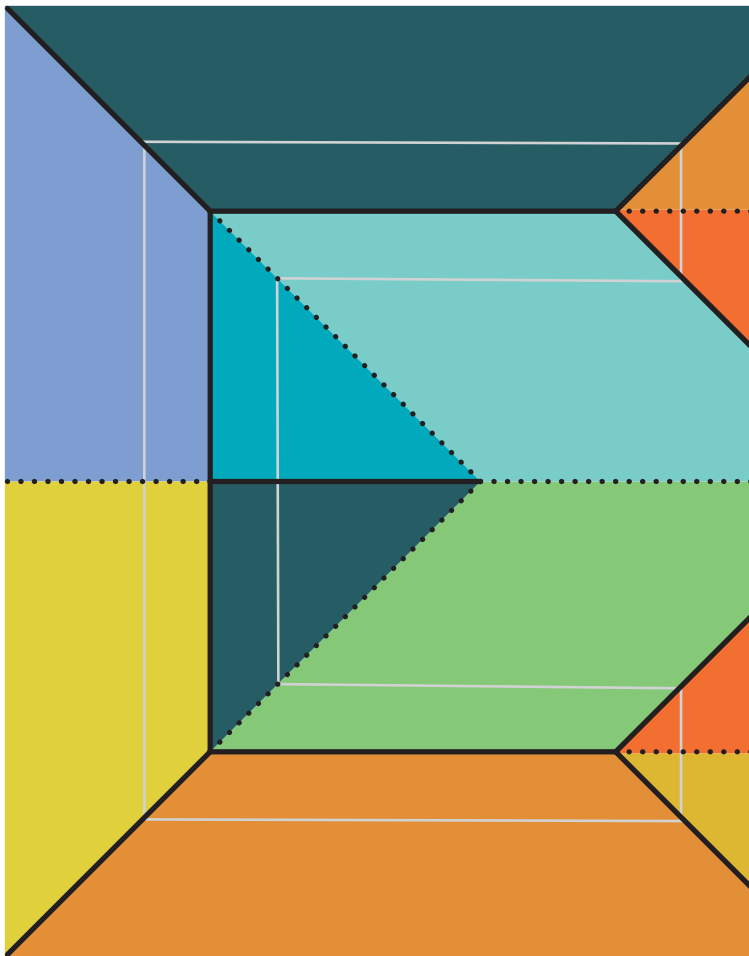
ALTERNATIVELY REDUCE, OFFSET, AND ADVOCATE FOR A JUST TRANSITION

EATING Producing food, transporting food, and disposing of waste are responsible for a large proportion of global emissions. To reduce your carbon footprint, switch to a plant-based diet and you can reduce your footprint by 1/5. Many types of nuts are even carbon negative!

ENERGY We all use energy for heating and lighting workplaces and homes, transport, powering our devices, among many things. The less we rely on fossil fuels such as oil or gas, the better.

STUFF Many of the things we buy have carbon footprints of their own. Less stuff, less carbon. Used is better than new.

JOIN FORCES We are more powerful when we work together. You could start with your workplace. Find out what its net zero carbon strategy is, and help to make it happen.



INSTRUCTIONS

Fold only along the thick solid and dashed lines until the shape collapses flat. Thick solid lines are 'mountain' folds, dashed lines are 'valley' folds. Once folded, make one straight cut along the thin line. Unfold.



**COMMUNICATING
CLIMATE RISK
A TOOLKIT**

Download PDF bit.ly/CommunicatingClimateRisk

JO LINDSAY WALTON *twitter* @jolwalton
DILMAN DILA dilmandila.com
JANA KLEINEBERG kleineberg.co.uk
ANDREA MORREAU *instagram* @morreaudrey
& POLINA LEVONTIN “CARBON DELI”

**THE GREAT
EXHIBITION
ROAD FESTIVAL**