

Activity

Ecological Footprint

General audiences and companies

How can we leave a positive Footprint on the planet?

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TECHNICAL INFORMATION

Topic The impact of our society on the planet and how a Circular Economy may reduce our Footprint

Summary Create an Ecological Footprint, an interactive activity based on a platform that analyses our impact on the planet according to our consumer habits and lifestyle. Participants will be asked to find solutions to reduce their negative impact and promote a more positive impact both on the city where they live and on the planet.

Suggested audience General public.

Estimated Duration 1 hour and 30 minutes.

Materials A computer with internet access, a projector, notebooks or blank sheets of paper, large sheets of kraft paper or construction paper, tape, colored markers.

Objective Learn about the impacts caused by our current consumer habits and by the way we dispose of products. Suggest individual and collective changes to create a more positive impact.

Expected results Add sentences to the Circular Economy manifesto, committing to new behaviors, habits, and actions in order to reduce the Ecological Footprint and promote a more positive impact.

SUMMARIZED STEPS

1. Warm-up 20 minutes

Introduce the topic and concepts to all participants through a video, a text, and a discussion.

2. Interactive Activity 60 minutes

Calculate participants' Ecological Footprint and discuss the results in small groups. Search for solutions to different product categories and write down a statement with a commitment to reducing their Ecological Footprint and expand their positive impact.

3. Wrap-up 10 minutes

Share each group's additional sentence for the manifesto.



STEP BY STEP

Intro

Our Ecological Footprint is used to calculate how much our lifestyle impacts the world we live in.

The resulting number tells us how many planets we would need if all the people in the world had the same consumer habits as the person having their Footprint calculated. That includes carbon emissions, cultivated and pasture areas, forest clearing, total build area and fishing stocks.

Several studies show that we have used more resources than our planet is capable of regenerating. We exploit more resources and generate more waste than the planet is able to produce, metabolize and regenerate. Forecasts by the United Nations on population growth and consumer habits show that by 2030 we will need two whole planet Earths to keep up with our demand (WWF, 2020).

Despite being only a simulation, the Ecological Footprint is an opportunity to reflect on how our manufacturing processes, consumer habits and waste generation impact, either positively or negatively, life in our planet. It is also an amazing opportunity to encourage people to embrace individual and collective change to reduce our negative Footprint and maybe even increase our positive impact.

A Circular Economy provides us with a myriad of ideas that contribute to this discussion. In this activity, we will explore different possibilities for how to reduce the pressure we exert on natural resources and waste generation.

Recommendations:

Introductory activity on Circular Economies

Before using this Teaching Sequence with participants, we recommend first conducting [the intro activity on Circular Economies](#) with them. This is an important step to introduce the main concepts needed for this discussion.

1. Warm-up

Video Discussion | 15 minutes

Show participants the following video and tell them to take notes about their impressions and ideas:

- [Global Footprint Network calculates mankind's Ecological Footprint.](#)
(4:31 minutes)

link: encurtador.com.br/fjsHS

Next, ask them to form a circle. Pose some questions to help start and guide the discussion, such as:

What was most surprising for you in the video?

Do you see yourself in any part of the video?

How can we reduce the negative impact we have on the planet?

Is it possible to have a positive impact? How?

We suggest taking notes of the main contributions on a computer, using short, summarized sentences that might be projected to participants while they talk.

What is an Ecological Footprint? | 2 minutes

Project WWF's text from your computer so that participants are introduced to the concept of an Ecological Footprint:

"Have you ever thought about the impact our lifestyle has on the environment? That's right. Our journey on Earth leaves 'tracks' behind, our 'footprint', which may be larger or smaller, depending on how we tread the path."

An Ecological Footprint is a measuring methodology that assesses how much pressure the consumer habits of human populations place on natural resources."

- [Ecological Footprint? What is that?](#)

link: encurtador.com.br/cwOPU

What makes up our Ecological Footprint? | 3 minutes

Project the WWF text to participants to show them what are the factors that will be taken into consideration when calculating their Ecological Footprint.

"The Ecological Footprint of a country, a city or an individual corresponds to the extension of land or water areas used in the products, goods and services required to support their lifestyle. In other words, the Ecological Footprint is a way to translate, into hectares (ha), the area "used" by an individual or community, on average, to support their lifestyle."

Next, list all the Footprint components:

 <p>© WWF-Brasil</p>	Carbono Representa a extensão de áreas florestais capaz de sequestrar emissões de CO2 derivadas da queima de combustíveis fósseis, excluindo-se a parcela absorvida pelos oceanos que provoca a acidificação.	 <p>© WWF-Brasil</p>	Florestas Representa a extensão de áreas florestais necessárias para o fornecimento de produtos madeireiros, celulose e lenha.
 <p>Alimentação, trigo © WWF-Brasil</p>	Áreas de cultivo Representa a extensão de áreas de cultivo usadas para a produção de alimentos e fibras para consumo humano, bem como para a produção de ração para o gado, oleaginosas e borracha.	 <p>© WWF-Brasil</p>	Áreas construídas Representa a extensão de áreas cobertas por infraestrutura humana, inclusive transportes, habitação, estruturas industriais e reservatórios para a geração de energia hidrelétrica.
 <p>© WWF-Brasil</p>	Pastagens Representa a extensão de áreas de pastagem utilizadas para a criação de gado de corte e leiteiro e para a produção de couro e produtos de lã.	 <p>© WWF-Brasil</p>	Estoques pesqueiros Calculada a partir da estimativa de produção primária necessária para sustentar os peixes e mariscos capturados, com base em dados de captura relativos a espécies marinhas e de água doce.

- [What makes up the Footprint?](#)

link: encurtador.com.br/fEGOU

2. Activity

Individual Ecological Footprint | 10 minutes

Now, participants should calculate their Ecological Footprint to better understand how this concept applies to their lives.

Each participant should fill in the Ecological Footprint form individually. To do so, they can use their smartphones, or computers available to them for this activity. Use the following link to calculate their Footprint:

- Ecological Footprint Calculator:

<http://www.pegadaecologica.org.br/>

Sharing Experiences | 10 minutes

Next, ask participants to form groups to discuss their results. These groups will be the same throughout the next activities.

Ask each group to choose one person to take notes of the main ideas in a large sheet of kraft paper. These notes will be later shared with the other groups.

Give groups enough time for all participants to share their experiences and talk about their Ecological Footprints. Recommend that participants share which categories most impacted their Footprint (food, housing, goods, services, tobacco, transportation or government) and that they read the suggestions listed on the website on how to reduce this impact (if the same category is mentioned more than once, they may skip this second step).

After all participants have shared their results, if time allows, tell them to talk about what they think about the exercise itself and whether, for example, they think other important indicators could be added

Inspirational video | 5 minutes

Having shared their experiences, now it is time for participants to discuss

how a Circular Economy can contribute to reducing the impacts of our Footprint on the planet.

Show participants a video on how to use products differently:

- [Meet the people rethinking ownership](https://www.encurtador.com.br/opADO). (4:04 minutes)
[encurtador.com.br/opADO](https://www.encurtador.com.br/opADO)

Recommendations: Closed captions are available in Portuguese. Click the icon at the bottom of the video to activate subtitles and, next, go to "details" and choose: "Subtitles/CC", "Auto-translate" and "Portuguese".

After participants have watched the video, tell them this video will serve as the inspiration for the next activity, in which groups will face the challenge of coming up with other solutions for this problem.

Searching for circular solutions | 15 minutes

Each group will have the mission to come up with new solutions for problems related to one of the categories in the Ecological Footprint (food, housing, goods, services, tobacco, transportation or government) based on the concepts of Circular Economies. Categories may be assigned to groups randomly or according to their interests.

After categories have been assigned, ask participants to use their phones or the group computer to search for information. Invite them to also explore this [interactive content](#).

Tell participants to take notes of their findings. When time is up, groups should go through their notes and talk about which solutions they liked best.

Writing sentences for the manifesto | 20 minutes

Explain to the groups that, now, they will contribute to the manifesto for a Circular Economy. Participants should come up with sentences that propose actions that will reduce the negative impact of our Footprint and promote a positive impact. All their contributions should have the principles of a Circular Economy at its core. Each group should come up with solutions for the problems in their category.

Read them the manifesto and show them that it suggests, at the end, that the audience contributes with additional sentences.

Access the [manifesto](#).



Tell the group that the manifesto aims to encourage people to join the movement and join efforts to implement the ideas of a Circular Economy.

They should then create sentences to complement the manifesto, by addressing the following challenge:

How can a Circular Economy make our Footprint on the planet better?

Remind groups to write their sentences according to the category assigned to them.

Recommend that they go through their notes, select the best ideas, and then write their sentence.

3. Wrap-up

Brief rehearsal | 5 minutes

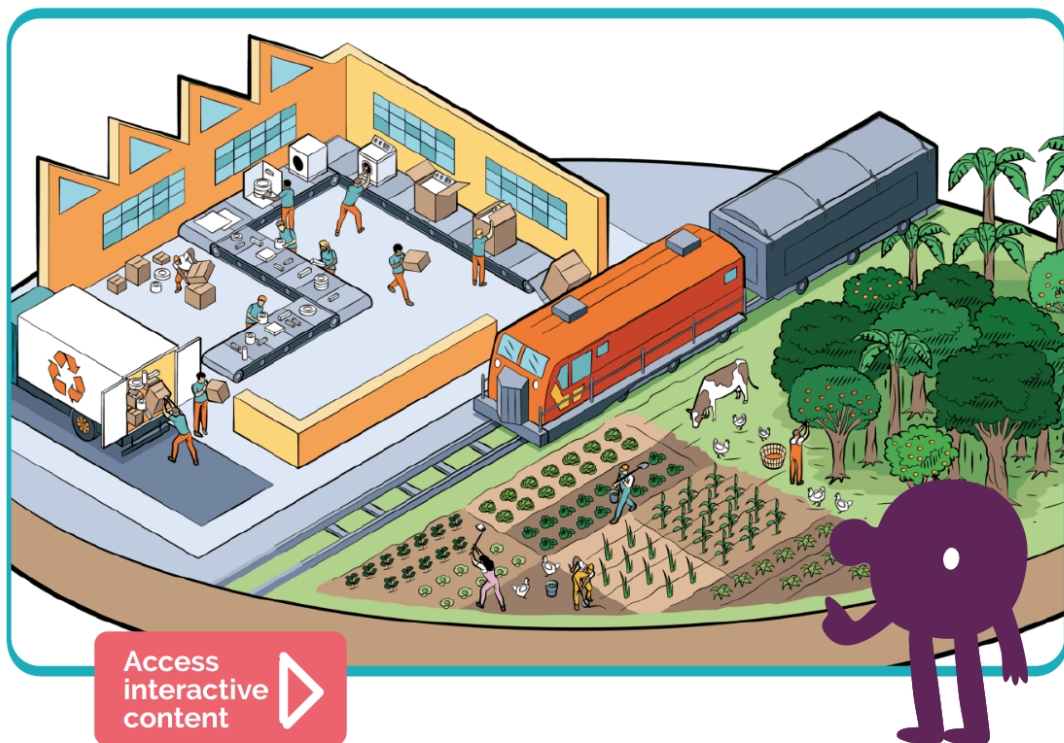
Finally, each group should present their sentence to the other participants.

Before doing so, allow time for groups to prepare. Each group should choose one person who feels comfortable speaking in public to present. This person will have some minutes to rehearse to their group to adjust for tone of voice, clear narrative, and emphasis.

Reading the manifesto | 5 minutes

After everyone is ready, groups should start presenting. Ask participants to form a circle. Each speaker should stand up in turn and read their sentences out loud. Encourage other participants to applaud at the end.

Recommendations: Either at the beginning or at the end of the session, write down the phone number or email address of all participants to share the documents used in this activity with them after the session.



REFERENCES

Videos:

Circular Economies: rethinking progress

<https://www.youtube.com/watch?v=OWxy4PXq2pY>

Meet the people rethinking ownership

<https://www.youtube.com/watch?v=oOKpymOgqWw>

Global Footprint Network calculates mankind's Ecological Footprint

<https://www.youtube.com/watch?v=SD4zArzv96s>

Meet the people rethinking ownership

<https://www.youtube.com/watch?v=oOKpymOgqWw>

Websites:

Circular Economy - UK, USA, Europe, Asia & South America - The Ellen MacArthur Foundation

<https://www.ellenmacarthurfoundation.org/>

The Circular Design Guide

<https://www.circulardesignguide.com/>

New Plastics Economy - The Future Of Plastics - New Plastics Economy

<https://www.newplasticseconomy.org/>

Circulate News -Medium

<https://medium.com/circulatenews>

Ideia Circular - Circular Design and Economy in Brazil

<https://www.ideiacircular.com/>

Ecological Footprint Calculator:

<http://www.pegadaecologica.org.br/>

Data Footprint Network

<http://data.footprintnetwork.org/#/>

Texts and documents:

What is Cradle to Cradle?

<https://www.ideiacircular.com/o-que-e-cradle-to-cradle>

What is a Circular Economy?

<https://www.ideiacircular.com/economia-circular/>

Ecological Footprint? What is that?

https://www.wwf.org.br/natureza_brasileira/especiais/pegada_ecologica/o_que_e_pegada_ecologica/

Components of the Ecological Footprint

[wwf.org.br/natureza_brasileira/especiais/pegada_ecologica/o_que_compoe_a_pegada/](https://www.wwf.org.br/natureza_brasileira/especiais/pegada_ecologica/o_que_compoe_a_pegada/)

What is your Footprint?

https://www.wwf.org.br/natureza_brasileira/especiais/pegada_ecologica/sua_pegada/