

Lesson Plan: The COVID-19 Pandemic: Economic Policy for 'Green Recovery'

As an **Undergraduate Economics** teacher, you can use this lesson plan to teach your students how countries around the world design **economic policies for a 'green recovery'** from the economic downturn due to the COVID-19 pandemic, by **reducing carbon emissions** while boosting their economies.

Through this lesson plan your students will be introduced to one of the most significant issues of our times- **Climate Change**- and will be able to learn how economic policies can be designed for a 'green recovery' from the coronavirus pandemic. In this lesson plan, students will be able to learn through a classroom activity, the role of **carbon pricing** in the reduction of carbon emissions and its significance for climate mitigation. Further, this activity will enable students to discuss how carbon pricing vis a vis carbon taxes, could help governments' 'green recovery' economic strategies to rebound from the COVID-19 pandemic related economic slowdown.

Thus, the use of this lesson plan allows you to integrate the teaching of a climate science topic with a core topic in **Economics**.

Use this lesson plan to help your students find answers to:

1. What does 'green recovery' mean in economic terms in the context of the COVID-19 pandemic?
2. What are some of the economic stimulus packages designed by governments for a 'green recovery' from the coronavirus pandemic?
3. How does carbon pricing help to reduce carbon emissions? What is its significance in the economic recovery plans from the COVID-19 pandemic?
4. What could be the impact of 'green recovery' economic policies for climate mitigation?

About the Lesson Plan

Grade Level: Undergraduate

Discipline: Economics

Topic(s) in Discipline: Environmental Economics, Green Recovery, Carbon Emissions, Carbon Pricing, Carbon Taxes

Climate Topic: Policies, Politics and Environmental Governance; Energy, Economics and Climate Change; Climate Mitigation and Adaptation

Location: Global

Access: Online, Offline

Language(s): English

Approximate Time Required: 120-150 min

1 Contents

1. Reading (10 min)

A reading to introduce the COVID-19 narrative alongside climate change, in defining future economic policies.

This can be accessed at:

<https://voxeu.org/article/coming-battle-covid-19-narrative>

2. Reading (25 min)

An interactive webpage to track the world's COVID-19 related 'green recovery' plans aimed at reducing carbon emissions while boosting economies.

This can be accessed at:

<https://www.carbonbrief.org/coronavirus-tracking-how-the-worlds-green-recovery-plans-aim-to-cut-emissions>

3. Reading (10 min)

A policy brief about the importance of pricing carbon for a 'green recovery' from the coronavirus pandemic.

This can be accessed at:

<https://www.cccep.ac.uk/wp-content/uploads/2020/05/Pricing-carbon-during-the-recovery-from-the-COVID-19-pandemic.pdf>

4. Classroom/Laboratory Activity (75-90+ min)

A classroom activity to enable discussion on economic policy options such as carbon pricing, carbon taxes, and emissions trading for reducing carbon emissions in the context of 'green recovery' from the COVID-19 pandemic.

This can be accessed at:

https://serc.carleton.edu/integrate/teaching_materials/carbon_emissions/unit6.html

5. Suggested questions/assignments for learning evaluation

- What does 'green recovery' mean in economic terms in the context of the COVID-19 pandemic?
- What are some of the economic stimulus packages designed by governments for a 'green recovery' from the coronavirus pandemic?
- How does carbon pricing help to reduce carbon emissions? What is its significance in the economic recovery plans from the COVID-19 pandemic?
- What could be the impact of 'green recovery' economic policies for climate mitigation?

2 Step-by-step User Guide

Here is a step-by-step guide to using this lesson plan in the classroom/laboratory. We have suggested these steps as a possible plan of action. You may customize the lesson plan according to your preferences and requirements.

1. Introduce the COVID-19 narrative alongside climate change, in defining future economic policies

Use the reading, 'The coming battle for the COVID-19 narrative' by Samuel Bowles, Research Professor and Director of the Behavioral Sciences Program, Santa Fe Institute and Wendy Carlin, Professor of Economics, UCL for VOX, CEPR Policy Portal, to explain how the COVID-19 pandemic will be an important consideration alongside climate change, in the future narrative of economics and public policy.

This can be accessed at:

<https://voxeu.org/article/coming-battle-covid-19-narrative>

2. Introduce the economic strategies planned by governments world-wide to enable a 'green recovery' from the coronavirus pandemic

Use the webpage, 'Coronavirus: Tracking how the world's 'green recovery' plans aim to cut emissions' by Carbon Brief to explain the different strategies planned by various governments for their nations' economic recovery. Use the in-built interactive grid to discuss the measures aimed at reducing carbon emissions- referred as 'green' measures- for several major economies such as United Kingdom, European Union, China, and India. Highlight the sector-wise application of monetary policy such as stimulus packages, unconditional bailouts, grants, loans, and tax reliefs to enable a post-pandemic green economic recovery.

This can be accessed at:

<https://www.carbonbrief.org/coronavirus-tracking-how-the-worlds-green-recovery-plans-aim-to-cut-emissions>

3. Discuss the importance of pricing carbon for a 'green recovery' from the coronavirus pandemic

Use the policy brief, 'Pricing carbon during the economic recovery from the COVID-19 pandemic' by the Grantham Research Institute on Climate Change and the Environment and the Centre for Climate Change Economics and Policy, to discuss their recommendations for governments globally including zero-carbon investments, removal of fossil-fuel subsidies, and using carbon pricing revenues for economic recovery. Emphasize on carbon pricing as an effective strategy to reduce carbon emissions worldwide (refer to the additional resources section).

This can be accessed at:

<https://www.cccep.ac.uk/wp-content/uploads/2020/05/Pricing-carbon-during-the-recovery-from-the-COVID-19-pandemic.pdf>

4. Conduct a classroom activity to enable discussion on economic policy options for reducing carbon emissions

Use the classroom activity, 'Carbon Emissions Game' by Gautam Sethi, Bard College for SERC, to enable discussion on economic policy options such as carbon pricing, carbon taxes, and emissions trading for reducing carbon emissions. Follow the instructions for the activity and conduct discussions on the effective use of economic tools such as carbon pricing in reducing carbon emissions for the global economic recovery from the COVID-19 pandemic.

This can be accessed at:

https://serc.carleton.edu/integrate/teaching_materials/carbon_emissions/unit6.html

5. Questions/Assignments

Use the tools and the concepts learned so far to discuss and determine answers to the following questions:

- What does 'green recovery' mean in economic terms in the context of the COVID-19 pandemic?
- What are some of the economic stimulus packages designed by governments for a 'green recovery' from the coronavirus pandemic?
- How does carbon pricing help to reduce carbon emissions? What is its significance in the economic recovery plans from the COVID-19 pandemic?
- What could be the impact of 'green recovery' economic policies for climate mitigation?

3 Learning Outcomes

The tools in this lesson plan will enable students to:

- describe worldwide economic strategies for a 'green recovery' from the COVID-19 pandemic
- learn about the significance of carbon pricing for reducing carbon emissions and specifically in the context of post coronavirus pandemic economic recovery
- discuss the importance of 'green recovery' from COVID-19 pandemic for climate mitigation

4 Additional Resources

If you or your students would like to explore the topic further, these additional resources will be useful.

1. Reading; 'World's largest study shows carbon pricing reduces emissions'

An article by James Giggacher, Australian National University, about a worldwide study that shows that carbon pricing reduces carbon emissions.

This can be accessed at:

<https://phys.org/news/2020-07-world-largest-carbon-pricing-emissions.html>

2. Video; 'Webinar: What impact is Covid-19 having on global CO2 emissions?'

A webinar with leading climate scientists and analysts, hosted by Carbon Brief.

This can be accessed at:

https://www.carbonbrief.org/webinar-what-impact-is-covid-19-having-on-global-co2-emissions?utm_source=Web&utm_medium=contentbox&utm_campaign=Covid-box

3. Reading; 'Climate change will ultimately cost humanity \$100,000 per ton of carbon, scientists estimate'

An article by Louise Lerner, University of Chicago, that describes a recent publication by two scientists and a philosopher from University of Chicago about the estimated 'ultimate cost of carbon' to humanity.

This can be accessed at:

<https://phys.org/news/2020-09-climate-ultimately-humanity-ton-carbon.html>

5 Credits/Copyrights

All the teaching tools in our collated list are owned by the corresponding creators/authors/organizations as listed on their websites. Please view the individual copyright and ownership details for each tool by following the individual links provided. We have selected and analyzed the tools that align with the overall objective of our project and have provided the corresponding links. We do not claim ownership of or responsibility/liability for any of the listed tools.

1. Reading; 'The coming battle for the COVID-19 narrative'

By [Samuel Bowles](#), Research Professor and Director of the Behavioral Sciences Program, Santa Fe Institute and [Wendy Carlin](#), Professor of Economics, UCL for [VOX, CEPR Policy Portal](#)

2. **Webpage; 'Coronavirus: Tracking how the world's 'green recovery'**

By [CarbonBrief](#)

3. **Reading; 'Pricing carbon during the economic recovery from the COVID-19 pandemic'**

By the [Grantham Research Institute on Climate Change and the Environment](#) and the [Centre for Climate Change Economics and Policy](#)

4. **Classroom activity; 'Carbon Emissions Game'**

By [Gautam Sethi](#), Bard College for [Science Education Resource Center at Carleton College \(SERC\)](#)

5. **Additional Resources**

[James Giggacher](#), Australian National University, on [Phys.org](#).

[CarbonBrief](#)

[Louise Lerner](#), University of Chicago, on [Phys.org](#).