## **Lecture 2.8 – Providing Critical Feedback**

## **Learning Objectives:**

- 3.1 Load, clean, and organize data in R.
- 3.2 Learn how to plot quickly using R's base graphics.
- 3.3 Learn the basics of ggplot2.
- 3.4 Execute qualitative and quantitative data analyses.
- 3.5 Think and work independently with code.
- 3.6 Understand the basic principles of data visualization and communication.

## Discussion: Why do we give feedback?

To improve the person's work receiving the feedback

To gain a new perspective on your work

To improve the product

For next slide: Read Waldrop-PeerReviews.rft.

- Which reviewer was most helpful?
- Which reviewer was least helpful?
- Pick out one example of useful criticism and one example of not useful criticism.

## Discussion: What makes feedback constructive (or not)?

Qualities of Constructive Feedback Qualities of NON-Constructive Feedback

## Tips for Providing Constructive, Professional Feedback

- Start with something positive
- Focus on the problem, not the person
- Avoid using second-person
- Be specific
- Provide solutions (if possible)
- Remember, your goal is to help!

## Tips for Receiving Feedback (Constructive or Otherwise)

- You are not your work
- Learn to recognize nonconstructive criticism
- Get back at bad feedback by getting better
- Bad feedback is not your fault (it's the reviewer's!)

#### **Visualization Reviews**

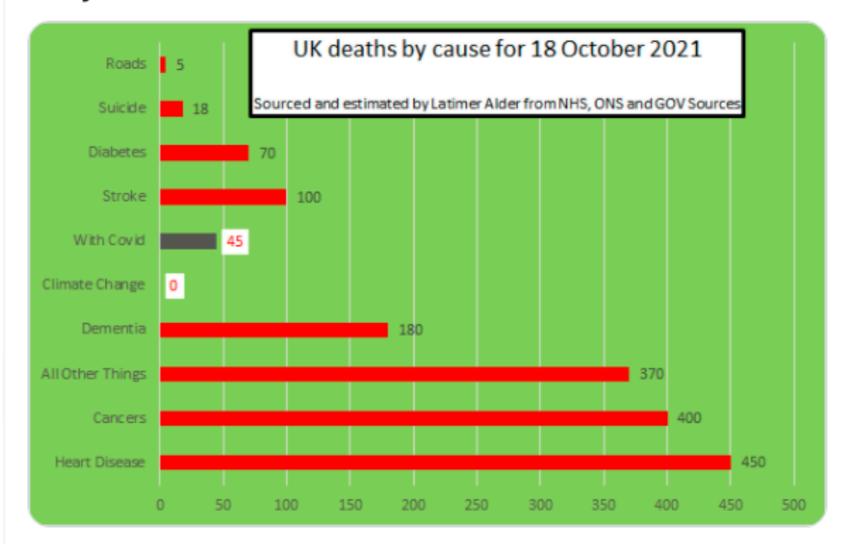
- Three students per team.
- Together you will create a summary of **two good points** and two points where improvement is needed. Group leaders: turn in list on Canvas!
- Suggested areas to look:
  - Is the visualization accurate and not misleading? If it is misleading, in what way?
  - Does the visualization make the point that the original poster wanted to make?
  - How much effort do you need to put into understanding the visualization? Is it very easy or very difficult? Do you think it is effective for the audience, ie people on Twitter? How could it be improved?
  - Is the visualization accessible to a variety of people?
  - Is it visually pleasing? If not, what makes it less pleasing?



You were 35 times more likely to die of something else in UK today than you were to die 'with Covid'

And of course, nobody at all died of climate change.

They never have.



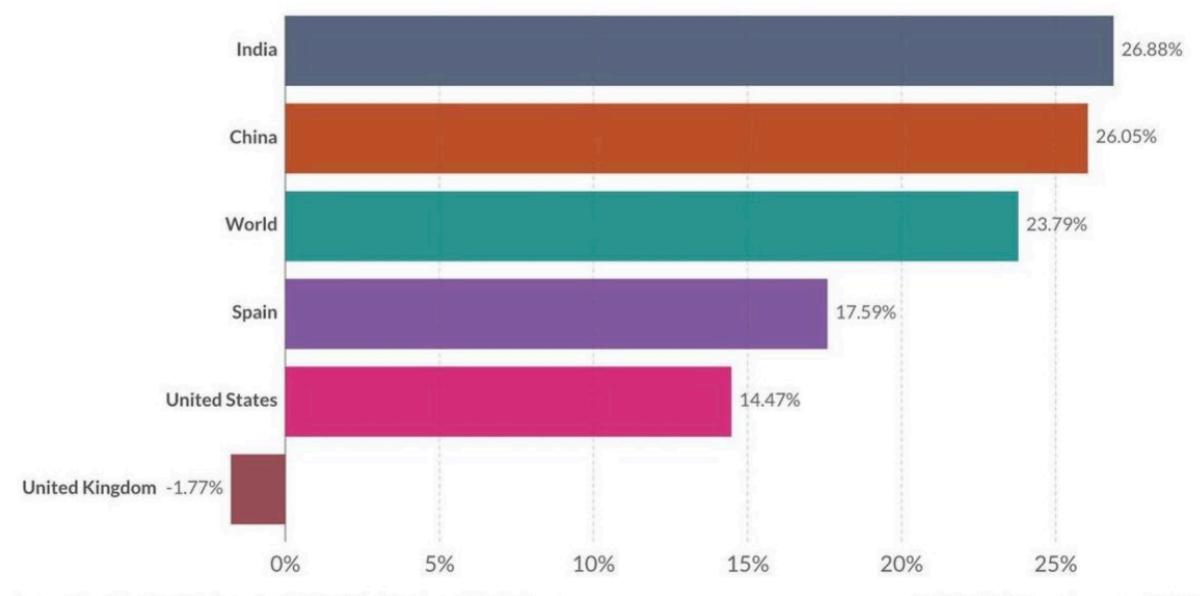
9:54 AM · Oct 18, 2021 · Twitter Web App

#### Annual percentage change in solar energy generation, 2019



Shown is the percentage change in solar energy generation relative to the previous year.

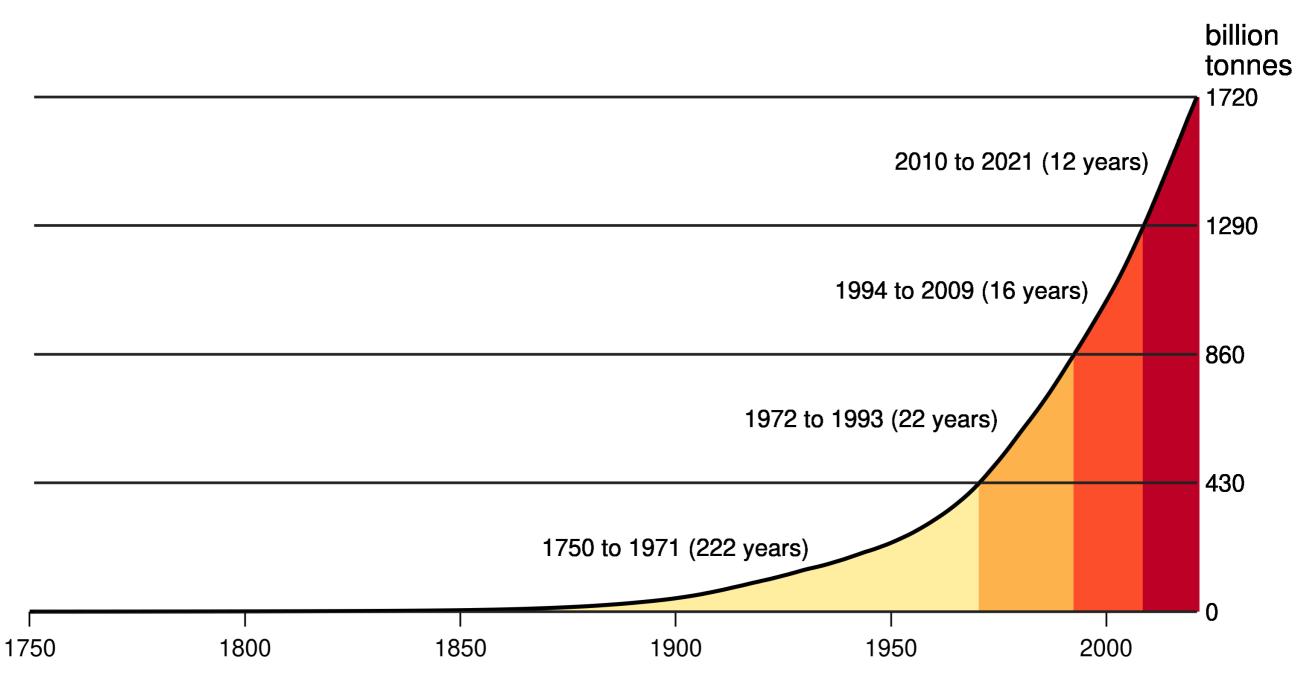




Source: Our World in Data based on BP Statistical Review of World Energy

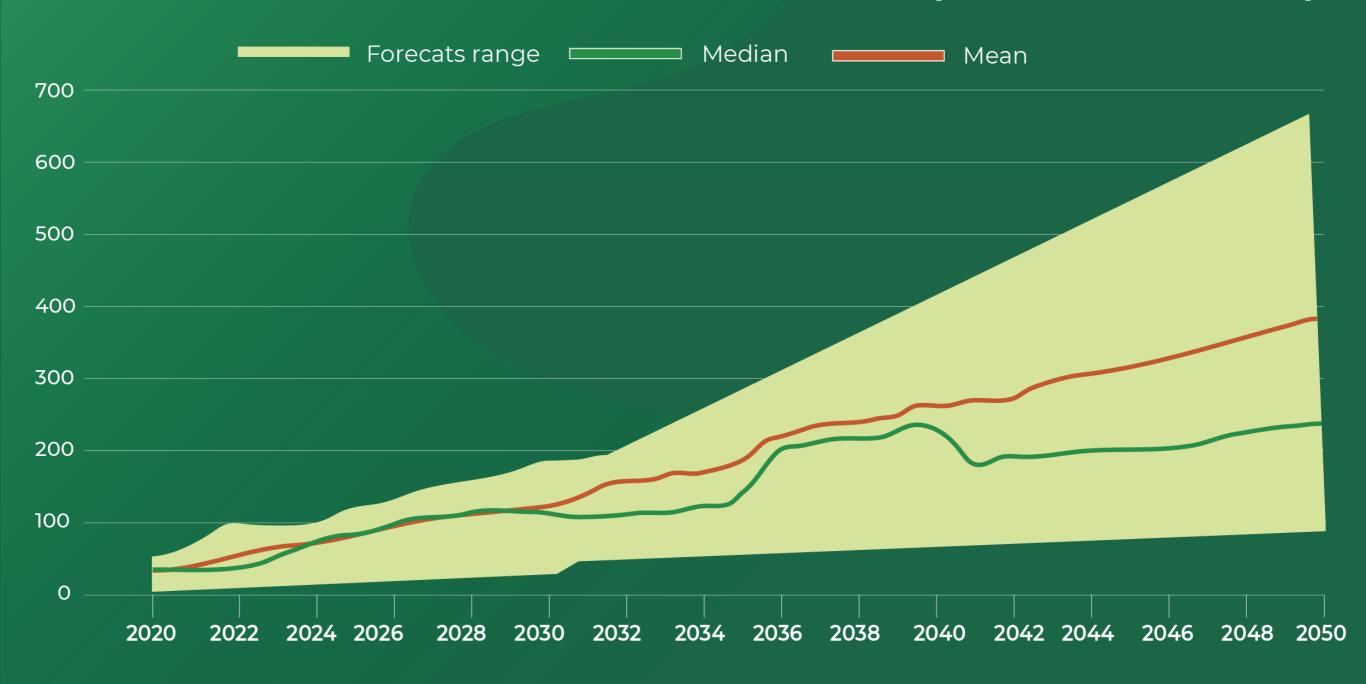
OurWorldInData.org/energy • CC BY

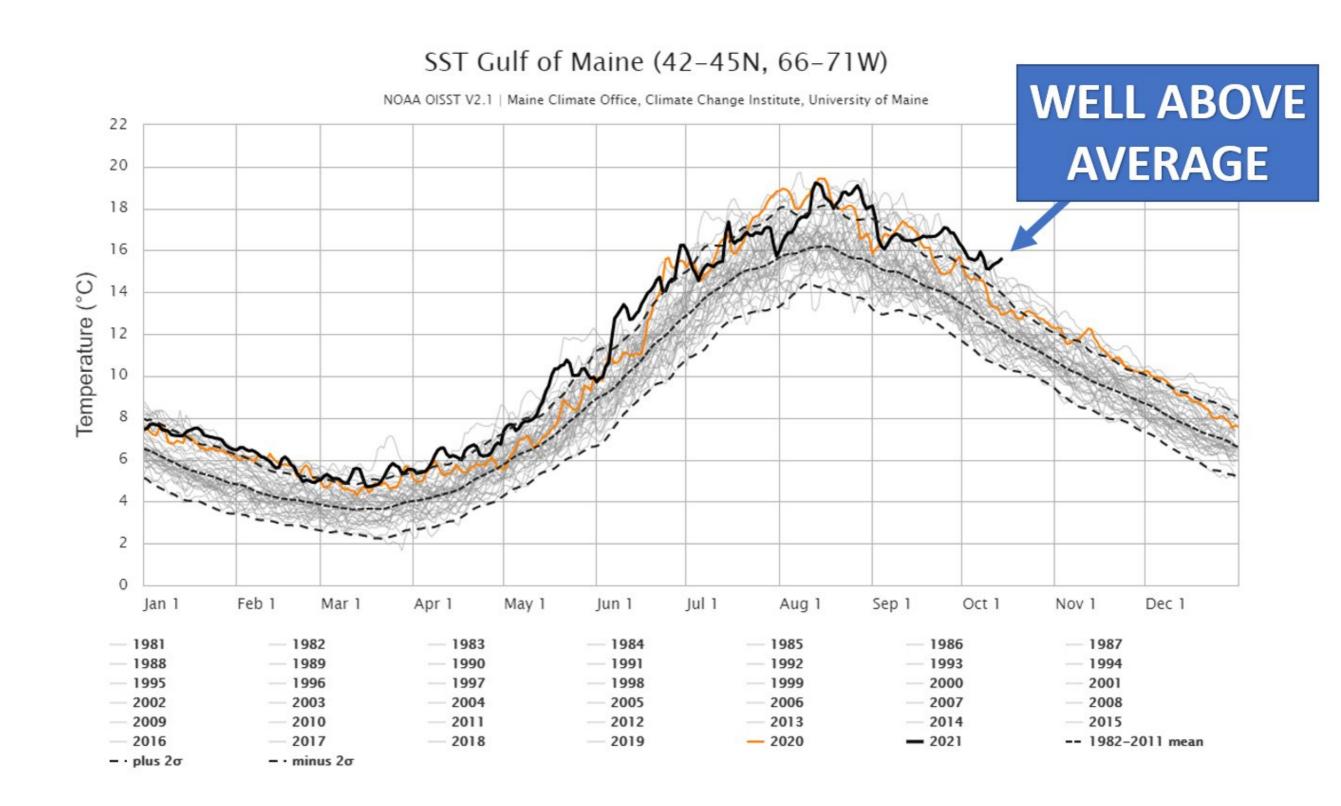
# Four periods of equal global fossil fuel CO<sub>2</sub> emissions (showing running total since 1750)

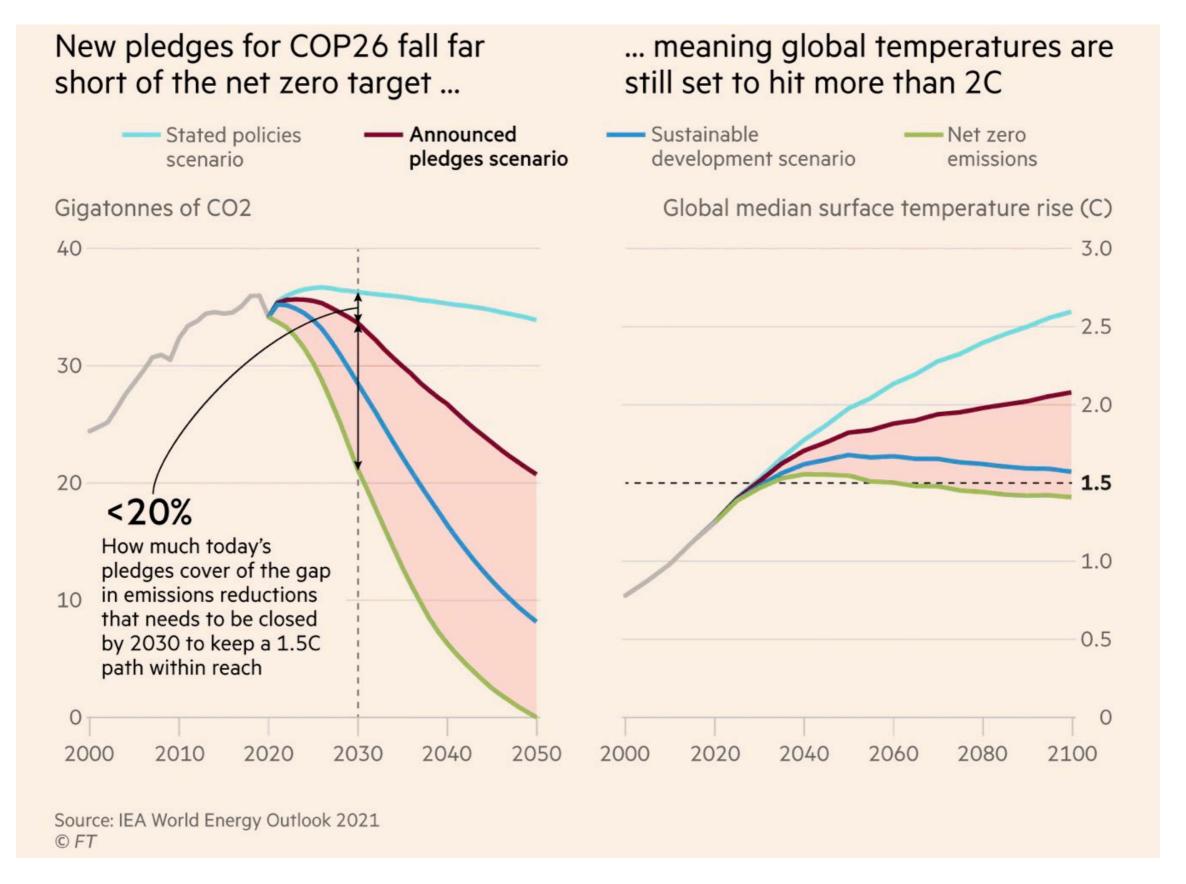


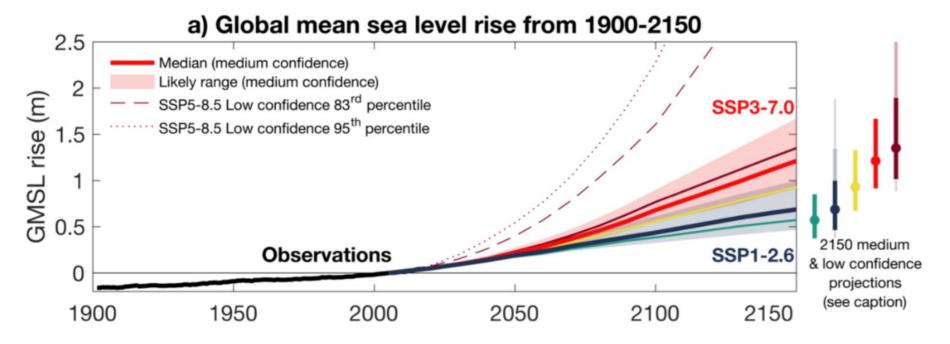
Data source: Friedlingstein et al (2020) created by: @neilrkaye

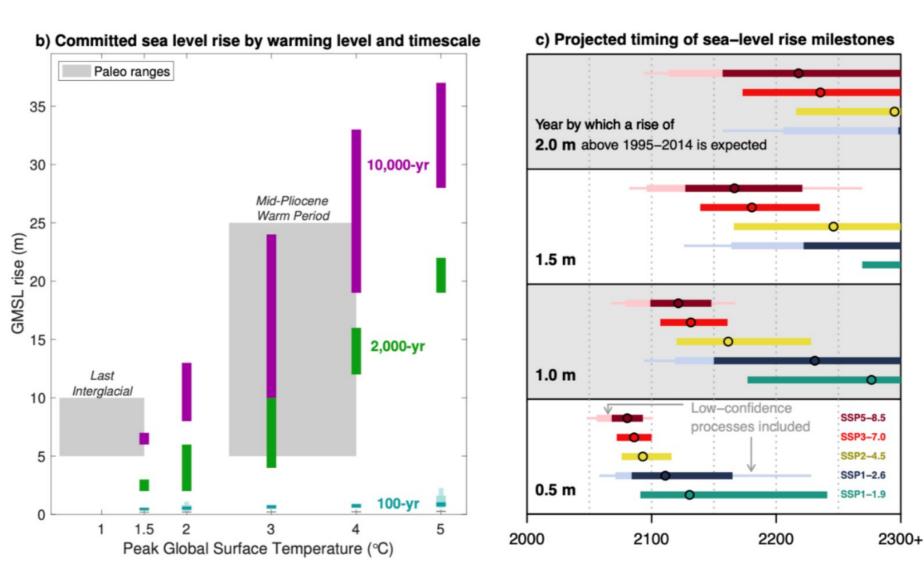
#### RANGE OF EXTERNAL CARBON PRICE FORECASTS (2020 PRICES, \$/tCO2)











#### **Action items**

1. Complete assignment 2.5 before end of class.

2. Prepare for Project 1 and Skill Check 2.2.