Weather LWS 2

In this LWS we are going to listen to some clips from "It's a Game Show!" episode of This American Life podcast (aired in December 2022) where they do something they've never done before: true stories told in the form of a game show.

The Act Two is called "I Bet Your Planet" – what do you think it means?

…hailing from New York City and Austin, Texas, director of research at Columbia University's Center on Global Energy Policy, she's modeled parts of the climate and energy future and worked around the globe for the US government, the International Energy Agency and the Asia-Pacific Energy Research Center. Say that three times fast. Please welcome Melissa Lott. Come on down.

1. Listen to the clip _____ What does Ira Glass ask Melissa Lott to do?

Listen again and fill the gaps with numbers.

We're going to try to get to ____ % cuts in emissions by the year _____ . Or to be very precise about this, our country's goal for the Paris Agreement is to cut __ to __ % of where our emissions were back in the year ____ .

Do you have any ideas on how greenhouse gas emissions can be reduced?

2. Listen to the next snippet and complete the statements _____

Since 2005, we've already reduced our emissions around 18%.

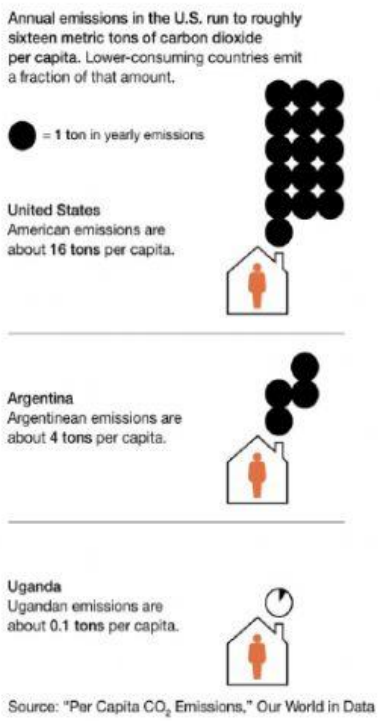
That's because of cheap _____ (2wds) , cheap _____ (2wds), cheap _____ (4wds).

And because _____ (1wd), _____ (2wds), and _____ (2wds) are making moves to lower their emissions.

But wait, there's more. Another 7% or so is **locked in** and ready to roll by the end of the decade. All told, 18% plus 7% gives you – **carry the 1, move it over to 2** – 25 big percentage points.

What do you think the phrases in bold are about?

3. Listen to the clip _____ How much is Melissa going to put on top of 25% in eight years (for her first turn)?
Listen again and decide whether the statements are T or F



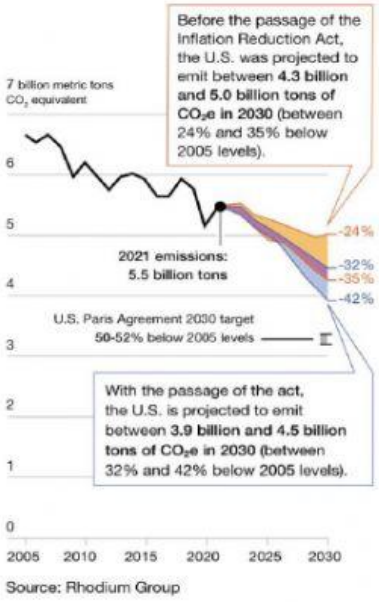
1. Melissa Lott thinks that President Biden's big climate and energy law is going to actually get America all the way to that 15%.

2. The law is called the Taxation Reduction Act. It's the biggest energy and climate legislation the American government has ever passed.

3. The Act covers tax laws supporting clean electricity and encourages businesses to insulate their buildings.

4. Concrete and cement aren't actually a big deal for the environment.

Try to order Melissa's lines. Listen again and check _____



__ So I'm talking about solar and wind and nuclear, all the stuff we need to produce zero carbon electricity.

__ And there's tax credits for capturing carbon before it actually goes into the atmosphere when we're making stuff like concrete and cement.

__ And then it gives us a lot of tax credits to bring a lot of electric vehicles on the road.

__ So it's a whole host of different things.

__ There's tax credits for businesses to help them insulate their buildings, let's say, so they can use less energy in the first place.

__ It's tax credits supporting clean electricity.

4.Listen to the clip and say how much Melissa is going to "put on the board" this time? _____

take something on board DEFINITIONS AND SYNONYMS
PHRASE

DEFINITIONS 1

1 to consider an idea, problem, or situation and try to deal with it

The committee will certainly take your opinions on board before making a decision.

Right off the bat Melissa says that she has ***a whole hodgepodge of stuff.*** *She's looking at*

where Americans already have momentum, and where they are already moving and just need to move a little bit faster in order to squeeze a couple more percentage points out of the things that are already working. That means three buckets to Melissa. ***What is the first bucket and how is it meant to work?***

power thesaurus

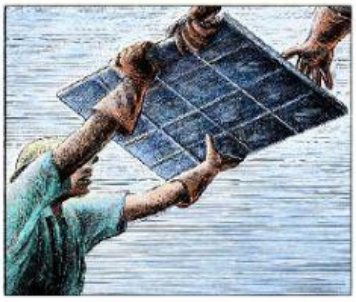
Synonyms for Hodgepodge

jumble | mixture | mishmash | mixed bag | assortment

5.Listen to the clip once and take notes about bucket 2 and bucket 3. What are the ideas about? _____

Now shadow the pieces

A. _____ So bucket two is about working with just a few big industries. So the ones that produce a lot of greenhouse gases. How do we work with them to get their emissions down really quickly?



B. _____ Steel's a good example. We make steel with coal today, but we can make it with electricity. So let's do that.

C. _____ So bucket three, I'm thinking about waste. So there's two big things that I want us to stop wasting and that would get us a few more percentage points. So the first part of this is about reducing greenhouse gas emissions that we just are throwing in the atmosphere. We're just wasting them.

D. _____ The big one here is methane. So it's fixing leaky pipes. It's about plugging abandoned oil and gas wells, stopping putting methane into the atmosphere.

E. _____ The second kind of waste is the waste we have when it comes to zero carbon electricity. So we've already built a lot of wind turbines, a lot of nuclear power plants, a lot of solar panels. And we're not using all that at zero carbon electricity. We're just wasting a lot of it.

F. _____ There's a bunch of different reasons. But it comes down to supply and demand not matching up.

G. _____ Is this a thing of like – the solar energy gets made, but there's no way to store it and there's no way to get it to the homes where it's needed? Is that what you mean?

H. _____ So to fix that, we build a lot of wires to move the stuff around. And then we also figure out ways to store that electricity.

I. _____ OK, so between those three buckets, you're saying that adds up to 10%. Can I ask you in the most real way possible, do you think that's actually going to happen? Are we actually going to get to 50% by 2030?

Look at the verbs and phrases from the shadowing activity and complete each phrase with the matching verb

stop **fix** **use** **produce**

plug **store** **build** **reduce** **built**

1) _____ a lot of greenhouse gases
2) _____ greenhouse gas emissions
3) _____ leaky pipes
4) _____ abandoned oil and gas wells
5) _____ putting methane into the atmosphere
6) _____ a lot of wind turbines, a lot of nuclear power plants, a lot of solar panels
7) don't _____ all that at zero carbon electricity
8) _____ a lot of wires to move the stuff around
9) _____ that electricity

Melissa Lott suggests making fossil-free steel which means using electricity instead of coal. She believes that the technology can contribute to reducing emissions by 2030. Can they? Watch the video and answer the questions:

1) What is the abbreviation for the Swedish fossil free steel technology?
2) How long have the blast furnaces been used to process iron ore into steel in pretty much the same way?
3) What does the blast furnace process use?
4) What do coal and coke turn into during the process?
5) What does direct reduction use?
6) What does this steel making process emit?

Go through the verbs and try to find the matching places for them in the transcript. Listen and check

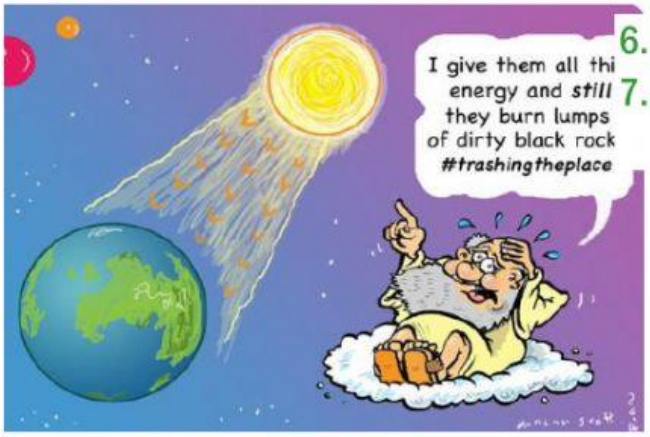
_____

as fast as we want **keep us from** **get all the way**

get over overshoot it get it paid for get it permitted

I think we're going to get close. I don't know if we're going to _____ there. I mean, we could _____ , honestly. There's a lot of different factors that go into that, including behavior, including broader things that are happening in the world that I have no insight into.

What's going to _____ maybe getting there _____ is all the non-technical stuff. So being able to actually build something, _____ , _____ in our markets. I think it's gonna be close. I don't know if we're going to _____ the 50% line in time, though.



6.

7. 6.Listen to the next clip and tell what some people describe as a wartime effort.
Now, put the lines in order, listen and check

_____

1 There's definitely a credible path. I think there is. But like with the next eight years, it's going to be challenging and it requires us to make a choice to get on that path.

__ We're electrifying those buildings.

__ Not just making more buildings more energy efficient.

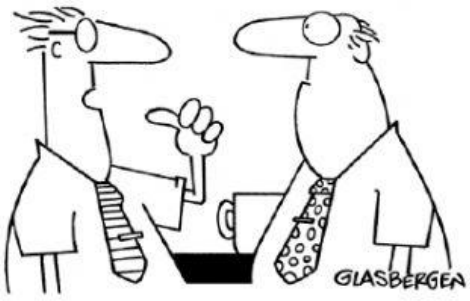
__ And a lot of it is just doing a lot more of what we've already been talking about.

__ We're getting every single car and truck and bus and plane to zero emissions.

__ We're making every single building more energy efficient.

__ Every single thing in our transportation.

__ We're pulling all the emissions out of those buildings.

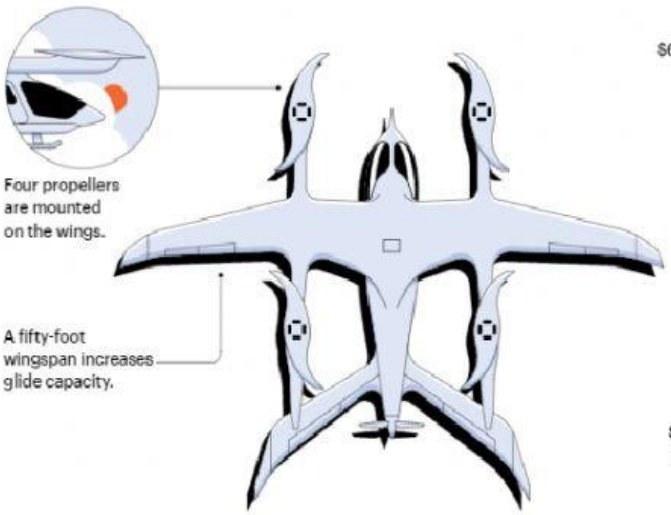


"There's some yogurt in the break room fridge that's going green. I think we can get a tax credit for that!"

Do you think all the measures are worth doing?

7.Read the transcript and try to figure out the correct form of words. Listen and check.

The Beta Alia, which runs on battery power, can travel a hundred and eighty miles on about twenty dollars' worth of stored electricity.



Ira Glass: Well, that makes me feel not so super _____ (hope), just to say.

Melissa Lott: But if we don't actually get there, we know the costs of _____ (action), of not moving there. And they're not pretty. So I'm talking about extreme events that flood Houston, or you know, swing across Florida. _____ (hot) waves in Southern California that lead to people _____ (die). When you start to add up all these health costs and also the _____ (insure) costs, the cost of _____ (building) homes, it's so much _____ (large) than building solar panels and nuclear power plants and retrofitting buildings and replacing cars.

Ira Glass: Well, listen, thank you so much for playing our game. Let's bring in some _____ (appropriately) cheerful game show music.

What is a building retrofit?

Retrofitting is the process of modifying something after it has been manufactured.

Retrofitting a building involves changing its systems or structure after its initial construction and occupation. This work can improve amenities for the building's occupants and improve the performance of the building. As technology develops, building retrofits can significantly reduce energy and water usage.