

## **Learning by Ear – Climate Change**

### **Episode 06**

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**Editing: Johannes Beck**

#### **CHARACTERS:**

##### **Scene 1:**

- LORNA (16)
- CAROL (14)
- NEWSREADER (FEMALE, ADULT)
- JOSHUA (15)
- ALEX (15)

##### **Scene 2:**

- CAROL (14)
- FARMER (MALE, ADULT)
- JOSHUA (15)

Scene 3:

- LORNA (16)
- HOTEL MANAGER (MALE, ADULT)
- ALEX (15)

Scene 4:

- LORNA (16)
- CAROL (14)
- ALEX (15)
- JOSHUA (15)

**Intro:**

Welcome to Learning by Ear and Episode Six of our radio drama on climate change. Lorna finally makes the big decision and the task force tries to discover further information about renewable energy sources.

Find out more as we listen to today's episode.

## Scene One: Lorna’s House

**SFX ATMO:**

**TV IN BACKGROUND**

**1. LORNA:**

What do we do? I can’t believe we’re being targeted simply because we’re concerned about climate change and global warming – it’s just...

**SFX**

**NEWS BULLETIN**

**2. NEWSREADER:**

Farmers in Africa are in the spotlight as potential partners in the race to halt climate change.

**3. CAROL:**

Hold on Lorna, let’s just watch this.

**4. NEWSREADER:**

The hunt for sustainable renewable energy sources has now turned to farmers in the continent as likely

producers of biofuels. Biofuels are produced from crops like wheat, sugar and jatropha ...

**SFX:**

**NEWSREADER VOICE AS BED  
UNDER**

**5. JOSHUA:**

Biofuels? That's what the environmental scientist was talking about.

**6. LORNA:**

Joshua, do you think biofuels could be an alternative source of energy for the power plant?

**7. ALEX:**

Who knows, Lorna?

**8. LORNA:**

That's right, Alex. I've decided. We're going to continue to fight this power plant. Either it goes green or we stop it going ahead. Are we all agreed?

**9. JOSHUA/CAROL:** Yes!

**10. ALEX:** Yes, ok then. But, Carol, we've got to be careful.

**11. CAROL:** I vote we find out about these biofuels as soon as possible and then finalise details for the demonstration. We've only got 3 days to go.

### **Scene Two: Jatropha Nursery**

**12. CAROL:** So, all these rows of plants lined up neatly, are jatropha plants?

**13. FARMER:** Yes, that's right. I started growing them a few years ago with a small grant from the World Bank. I heard a programme on the radio talking about the need to find an alternative to oil and other fossil fuels and that biofuels could be the answer.

**14. JOSHUA:** What exactly is a biofuel?

**17. FARMER:** "Biofuels" encompasses a wide range of fuels - vegetable oils, animal fats, ethanol, biodiesel. You get them by harvesting the raw material – be that sugar cane, corn or in my case jatropha – and you crush it a number of times to extract as much oil as possible.

**18. CAROL:** So, a biofuel that could power a car or a bus comes from a plant?

- 19. FAMER:** Yes, more or less. Sometimes, the oil can be used directly and put straight into a vehicle if its engine has been specially adapted. Otherwise you need to process the oil which could give you biodiesel or you have to blend it with normal fuel from a petrol station.
- 20. CAROL:** So biofuels are made of plants. But what is the advantage?
- 21. FARMER:** Biofuels are renewable. That means you could plant and harvest them again and again, not like coal or oil that can be burned only once. And biofuels normally produce less greenhouse gases compared to normal diesel or gasoline.
- 22. JOSHUA:** And why do you plant jatropha?

**23. FARMER:**

Well, jatropha grows very rapidly and can tolerate very arid climates like we have here in Africa. Scientists think that jatropha can stabilize or even reverse desertification.

**26. JOSHUA:**

Another question: if farmers like you dig up their fields of say, corn, or maize, food that we need to eat – and instead plant jatropha... who's going to be growing our food?

**27. FARMER:**

When I started growing jatropha that wasn't an issue. But now, as more and more farmers follow the trend it could cause problems.



- 28. CAROL:** Yeah. Food prices have already rocketed recently so if farmers start growing crops for biofuels, food will become even more expensive.
- 29. FARMER:** Mmm, maybe. But all I know is I get paid far better for planting the jatropha. It pays for my kids to go to school, whereas the maize I grew before just didn't provide me with enough income. Anyway, I've got to get back to work now. Bye.
- 30. JOSHUA:** Bye.
- 31. CAROL:** I'm even more confused than ever. Biofuels seem to be an excellent idea and a way to reduce climate change. But then there seem to be other problematic side effects.

**32. JOSHUA:** Carol, I know. But there must be more alternatives...

### **Scene Three: Outside Eco Hotel Palm Bay**

**SFX ATMO**

**HOTEL RECEPTION**

**33. LORNA:** So you see, Sir, the demonstration is likely to go past your hotel gates, but I can assure you there won't be a problem. We just want to make sure all the local businesses have been informed about it.

**34. HOTEL MANAGER:** I won't be able to join in, but I'll make sure my wife is there. I'm totally against this power plant. I think it's a big mistake. And you know, with a bit of thought it is possible for us to get by with renewable energy. I've done it with this hotel.

**35. LORNA:** Really? How?

**36. HOTEL MANAGER:** Come outside.

**SFX**

**WALKING OUTSIDE**

**SFX ATMO**

**GARDEN/BIRDS**

**37. HOTEL MANAGER:** See those black panels on the roofs?  
Well, they're solar panels. We have year-round sun here, so most of our power for the hotel comes from the solar panels – through radiation they convert sunlight into energy...

**38. ALEX:** To do what?

**39. HOTEL MANAGER:** We have some panels that heat our water, other panels produce electricity to power our lights – we also use energy-saving light bulbs as well.

**40. ALEX:** And what about when it's raining? Like during the rainy season when it can be cloudy for a week?

**41. HOTEL MANAGER:** Well, actually solar panels don't rely on direct sunlight to work – as long as there is daylight, some power will be generated.

**42. LORNA:** I'm impressed. But could solar energy provide enough electricity for Dhowville?

**43. HOTEL MANAGER:** I suppose it's possible. I've read about huge solar thermal power plants being tested in Spain – they concentrate the sun's energy with large mirrors to turn water into hot gas that powers turbines. So, you could produce enough energy for a small city.

**44. ALEX:** Sounds like it would cost a fortune to build and install.

**45. HOTEL MANAGER:** Solar energy is still very expensive, that's true. It costs many times the amount you would have to pay using gas or coal. It is a good solution for small villages in regions that are not connected to the grid. But for huge power plants it is still too expensive. But there are other, cheaper renewable energies like wind power, hydro or geothermal energy that could generate larger volumes of power.

**46. LORNA:** Wow, so many alternative sources of energy! I think we definitely need to do much more research into that. Thanks for all the information.

**47. HOTEL MANAGER:** Good luck with the demonstration, and keep up the good work.

### **Scene Four: Lorna's House**

**SFX ATMO:**

**RADIO/MUSIC**

**48. LORNA:**

Ok, we've got to make these signs look professional. Carol, can you read out what they say.

**49. CAROL:**

Right, I'm dividing them into three different slogans. "Green power plant or no power plant". "Stop climate change, say no to power plant". "Halt climate change – green power plant or no power plant".

**50. LORNA:**

Great.

**51. JOSHUA:** And they need to be painted in bold letters like the one Alex has done – then when the Press arrives, they can be filmed and photographed easily.

**52. LORNA:** Carol, did you deliver those press releases?

**53. CAROL:** Lorna, that's all done. And I'm still handing out flyers at the newspaper stand. We should have a good turnout.

**SFX**

**CLUNK SOUND AS POWER CUT**

**54. LORNA:** That's so annoying. A power cut! I'll just go and switch on the generator.

**55. JOSHUA:** Lorna, I can't believe you have a generator!



- 56. LORNA:** Why not, Joshua? My mum can afford the oil to run it.
- 57. JOSHUA:** Not because of that – but because an oil generator releases greenhouse gases which contribute to global warming.
- 58. CAROL:** That's a point!
- 59. LORNA:** But what else can we do – sit around in the dark?
- 60. JOSHUA:** That's what we have to do.
- 61. LORNA:** Mmm, I suppose Mum and I should be practising what we preach. Are you sure I can't put the generator on, just so we can finish the signs?
- 62. ALEX:** Ok, we'll let you off this once!

**63. LORNA:** Alex, it won't be a second.

**SFX**

**DOOR SLAMMING**

**64. LORNA:** **(scream)** Help! Come quickly!  
**(shouting from outside)**

**END OF EPISODE 6**

**Outro:**

And that's all from Learning by Ear for today. Join us next time when we find out what's happened to Lorna and whether the task force will go ahead with the planned demonstration.

This series about climate change is written by Victoria Averill.

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Goodbye for now and thanks for listening!