

Learning by Ear – Climate Change

Episode 01

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CHARACTERS:

Scene 1:

- CAROL (14)
- LORNA (16)
- DRIVER (MALE)

Scene 2:

- JOSHUA (15)
- CAROL (14)
- LORNA (16)
- ALEX (15)
- MRS KIMAU – SCIENCE TEACHER & LORNA'S MOTHER (45)

Intro:

Welcome to Learning by Ear and our new radio drama series about climate change.

The next ten programs will trace the lives of four young pupils at the same school: Joshua, who is 15, and comes from a poor family of fishermen but loves the sea. Carol is 14, and she is desperate to become a doctor and she works in the mornings selling newspapers to pay for her school fees. Lorna is 16; a very clever, outspoken girl, whose mother is a science teacher at the school, and 15-year-old Alex who has grown up lacking nothing in a big house on the beach and whose father is a prominent member of parliament in the area.

At home their lives are very different, but at school they all share a common concern - climate change and its effect on their lives and on the area where they live. Let's find out how far they will go to protect their village and its environment.

In our first episode Carol finds out about plans for a huge thermal electrical power plant to be built just outside their village.

Scene One: outside in the street

SFX ATMO: STREET/MARKET SOUNDS

1. CAROL: (shouting) Read all about it, new power plant could mean electricity for the whole village, read all about it, buy the Dhowville Times.

SFX: SOUND OF CAR DRIVING UP

2. DRIVER: I'd like a copy, please.

3. CAROL: That's 50 cents, Sir. Thank you. Here's your paper.

(shouting again)

Read all about it, an end to blackouts with new power plant planned in the village, buy your copy here, read all about it...

- 4. LORNA:** Hi Carol, it looks like you've sold loads more papers today than usual?
- 5. CAROL:** Oh hi, Lorna, you're off early to school. Yes, I know the paper's been selling so fast today. It must be the news on the front page. Look, here, about the plans for this power plant.
(rustle of newspaper)
- 6. LORNA:** What power plant, Carol,?
- 7. CAROL:** Apparently it's going to mean cheap power for nearly everyone - even my family might be able to afford to get onto the grid now.
- 8. LORNA:** Let's have a look
(takes paper)
- 9. LORNA:** Mmm, not sure I really like the sound of this. I mean, look, its says "the proposed plant would

be the largest thermal, electrical power plant in the region and would aim to supply cheap, affordable electricity to millions”.

12. CAROL: Largest in the region, did you say?

13. LORNA: Yes, Carol. And then it says here “the plant would be powered by bunker fuel or diesel, two effective and cheap raw materials readily available”. Sounds like an environmental catastrophe for starters. Hey, this is disastrous!

14. CAROL: Lorna, I follow what you mean: the plant is going to be so huge that it will be a problem for the environment. But what’s wrong with bunker fuel or diesel?

15. LORNA: Well, bunker fuel is the heavy oil that is left after refining the crude oil to produce diesel, kerosene and gasoline. It is waste oil! It's very thick and full of dirty materials.

16. CAROL: What's happens to this oil?

17. LORNA: Well, I've read that lots of ships use bunker fuel, because it is very cheap. And I've also heard that it's highly toxic when it's burned. So I guess that's what would be powering this new plant. Imagine the toxic waste that we'd all be breathing in.

18. CAROL: I see what you mean. Waste oil, yuk, and if this plant is going to be the biggest in the region, imagine how much they'll be burning. Tons and tons of the stuff.

- 19. LORNA:** Well, Carol, look here on page two,
"Environmentalists warn new power plant
could contribute to greenhouse effect".
- 20. CAROL:** Mmm, I wonder what that means.
- 21. LORNA:** The article continues, "The greenhouse gases
emitted from the power plant could potentially
cause more extreme weather conditions in the
region causing floods and even droughts".
Carol, it's all a bit confusing isn't it?
- 22. CAROL:** Lorna, I guess we'll cover it in science class.
- 23. LORNA:** Yes, anyway, we should get to school
otherwise we'll be late. Shall I help you pack
up the stall?

24. CAROL: Is that the time already? Yes, if you could help me, that would be great. **(Sound of moving papers)**

Scene Two: classroom

SFX ATMO: SCRAPING CHAIRS & DESKS

25a. All: (Chatter).

25b. JOSHUA: Hey Lorna, I'm glad we've got your mum for science classes this year. She seems to know her stuff.

26. LORNA: Thanks for saving me a place, Josh. Yeah, Mum's pretty passionate about teaching science, especially all the environment stuff. I guess she feels it's very relevant to us as normally, we who live in Africa are the ones who are most affected when natural disasters occur.

27. JOSHUA: Mmm, that's true. Hey, Alex, did you do the homework? We're meant to be pairing up today to talk to the class about the Greenhouse Effect. Did you do the reading?

28. ALEX: **(pulling up a chair)**
I kind of skim read it but to be honest I find it all very boring. Greenhouse this, greenhouse that. Anyway my dad says a lot of it is nonsense.

SFX: **OPENING OF A DOOR, FOOTSTEPS**

31. MRS KIMAU: Morning everyone. Today we're studying a very important topic: the Greenhouse Effect, and I think that Alex and Joshua are going to give us a brief intro on the topic. Alex?
Joshua?

32. JOSHUA: Yes, Mrs Kimau. I think I'll start and then Alex will interrupt with additional points, won't you Alex?

33. ALEX: Mmm, ok.

34. JOSHUA: Well, I think I'll do some drawings to illustrate.

SFX: **SOUND OF CHALK ON BLACKBOARD**

And the first thing to draw is a greenhouse like the ones all the flower farmers use.

SFX: **SOUND OF CHALK ON BLACKBOARD**

If you go into a greenhouse on a sunny day, what's it like?

35. ALEX Well, it's hot, of course.

36. JOSHUA Exactly. That's because the glass in the greenhouse traps the heat from the sun. And there are certain gases that do the same within our atmosphere...

- 37. MRS KIMAU:** Can you name any greenhouse gases?
- 38. JOSHUA:** Well, carbon dioxide for example. But even water vapour too. They have the same effect on the earth's atmosphere.
- 39. ALEX** How?
- 40. JOSHUA:** Well, the glass in the greenhouse keeps the plants or flowers inside warm, yes?
- 41. ALEX:** Sure.
- 42. JOSHUA:** In the same way the greenhouse gases keeps the planet warm. Without it we would freeze. But too much of it means we boil.
- 43. MRS KIMAU:** Joshua and Alex, why do you think the greenhouse effect is such a problem today?

44. JOSHUA: Well, today we're burning more fuels than ever before with carbon in them like oil, gas and coal to run our cars and power our factories.

45. MRS KIMAU: Exactly.

46. JOSHUA All these emit greenhouse gases like carbon dioxide.

47. ALEX: **(almost thinking/speaking out loud)**
Ah I see, and then the planet warms up even more. Wow, it makes sense.

48. MRS KIMAU: That's what most scientists think, Alex. That's why the greenhouse effect is a very worrying problem for us here in Dhowville, and for the whole planet. The fear is that as the world develops, we will need more electricity and

drive more cars and that means we risk emitting even more greenhouse gases.

51. CAROL: Did you say the greenhouse effect happens if we use electricity? Because I just read today in the paper that there are plans to build a power plant right here in Dhowville.

52. MRS KIMAU Well, no, but it depends on how the electricity is generated. We need to find out whether it will pollute or be a clean source of power.

53. CAROL: Well, Mrs Kimau, I'm sure I read that it's going to be powered by bunker fuel or maybe diesel. We saw it in today's paper.

55. MRS KIMAU: Well, Carol, that does sound worrying. We'll talk more about this tomorrow.

SFX: **SOUND OF LESSON BELL**

SFX: **SCRAPING OF CHAIRS**

56. ALEX: (talking to Joshua)

Oh, I know. My dad's been talking about that power plant. He thinks it's an amazing idea.

57. JOSHUA:

I'm sure so many of our families and friends have no idea about the greenhouse effect and global warming. You should talk to him, Alex.
See you tomorrow.

END OF EPISODE ONE

Outro:

And that's all from Learning by Ear for today.

This series about climate change is written by Victoria Averill.

Join us next time when Alex confronts his father about the proposed power plant in the town and find out how Alex, Lorna, Carol and Joshua plan to stop the power plant going ahead.

If you want to hear this program again, please visit our website at

D w world dot d e slash l b e

Goodbye for now and thanks for listening!