



# One phone, two lives

Adventure Book



**START**



Maja is tapping away quickly on her phone; her thumb seems to be dancing. She's a young student travelling on the bus that takes her from the suburbs into the city centre. Outside the windows, the buildings of Brussels, greyed by the steady rain, flash by, but she isn't paying attention, she's too focused...

The bus brakes sharply, Maja almost falls over and only then realises that her mobile's battery has run out; she's down to just 16 per cent.

**CONTINUE**

Maja used her phone as a filter between herself and the rest of the world, losing her phone meant losing her only link to the world. She tries to think of where she might be able to charge it: the library – her favourite place – doesn't have any charging points; the gym and the art gallery are too crowded for her to feel at ease.

By lunch, the battery was a single digit. She force-closed apps, deactivated Bluetooth, begged a miracle to charge her phone.

7% remained, it was a race against time to charge her phone while having to run under the rain to get home.

Then the screen died. Rain soaked her jacket as she decided: "tomorrow, I need to get a new phone".



**CONTINUE**

That night, laptop glow outlining her spine, she opened tabs and tallied costs. \$85 for a battery replacement; no waste, familiar phone revived. Pre-owned models “restored, tested, certified” for less, which have been used but are functional.

Or the GeloxyPro: 75% recycled materials, power-efficient processor, long-lasting battery for \$899–\$1,299. In her window’s reflection, she hovered over the spreadsheet. Repair, reclaim or upgrade. All made sense. All left her cursor frozen.

### MAJA'S CHOICE

⇒ Maja buys a  
refurbished phone.  
Go to page 12

⇒ Maja buys a new  
phone. Go to page 4

⇒ Maja repairs her  
phone. Go to page 9

She tells herself modern phones are more energy-efficient, whispering this mantra while stroking the glossy screen of her new GeloxyPro, its sleek titanium edges catching the bedroom light like polished obsidian. The emerald eco-glass reflects her wide-eyed face back at her, distorted and hopeful.

The website had explained it so convincingly, with animated graphics of spinning globes turning from brown to verdant green. 75% of the materials are recycled. Energy-efficient A14 processors that consumed 40% less power. Batteries are designed to last five years longer than previous models.

A new generation of technology, lighter on the planet. She had repeated those phrases to herself while choosing it, absorbing the language until it felt like common sense, like gospel truth.

**CONTINUE**

A video titled "The True Cost: Cobalt's Hidden Journey" appeared in her recommendations later that week.



The screen cast an electric blue glow across her face as she watched men vanish into rust-coloured earth through narrow shafts, their only protection, splintering wooden supports, seeming moments from collapse.

In measured tones, the narrator traced cobalt's path from these Democratic Republic of Congo mines through a complex web of middlemen and factories, ultimately powering the lithium-ion batteries inside phones, laptops, and electric cars worldwide.



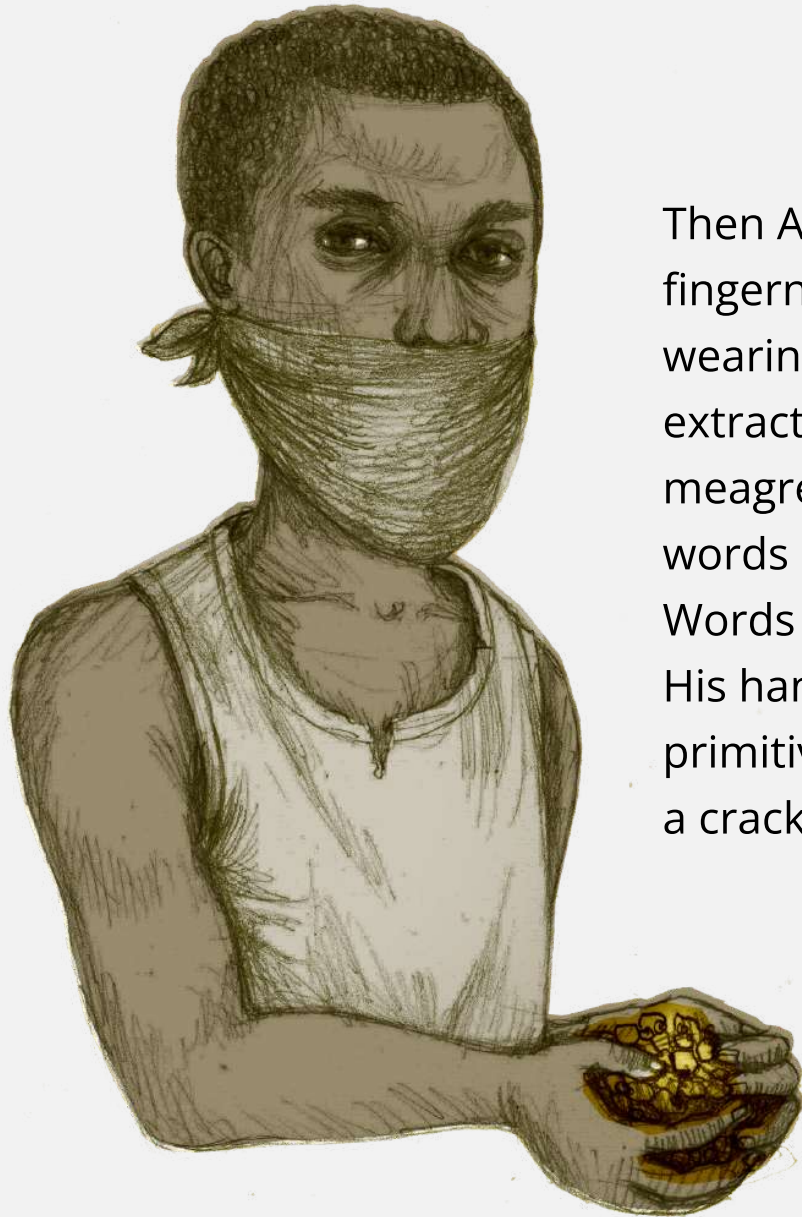
**CONTINUE**



### **Scientific Pop-up:**

The DRC holds approximately 70% of the world's known cobalt reserves and produces around 74% of global supply. Without Congolese cobalt, the lithium-ion batteries powering the world's phones, laptops and electric vehicles could not be manufactured at the current scale."

(RAID & AFREWATCH, 2024)



Then Amani appears in the video, a man with dust-encrusted fingernails and blackened cuticles. His eyes seem to hold all the weariness in the world, even though he is only twenty years old. Amani extracts the cobalt and places it into canvas sacks, each worth a meagre sum of just over 2 euros. Subtitles bearing Amani's resigned words scroll across the screen.

Words often interrupted by a persistent cough.

His hands calloused and scarred from chipping at the earth with primitive tools: a rusted hammer, a chisel worn to a nub, a shovel with a cracked handle wrapped in electrical tape.

**CONTINUE**

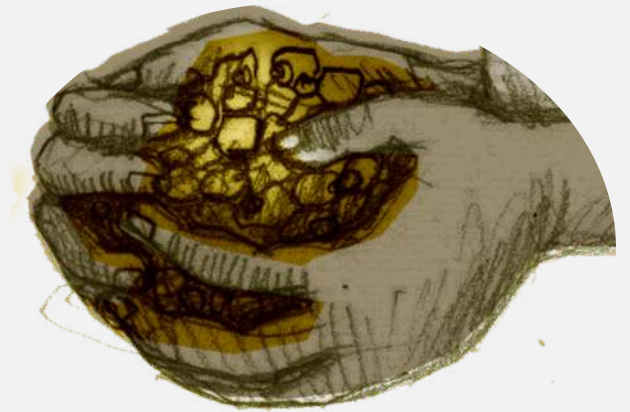


At some point in the videofilm, a term appears on the screen in bold crimson letters: “greenwashing”.

The voice continues the explanation: "Companies promote products as environmentally responsible while the deeper environmental and social costs remain hidden behind polished marketing campaigns featuring time-lapse footage of blooming flowers and pristine glaciers."

The phrase echoed inside her, just as Amani’s persistent cough had stuck in her mind, annoyingly overlapping with the words she had read just a few days earlier on the elegant website with its minimalist white background:

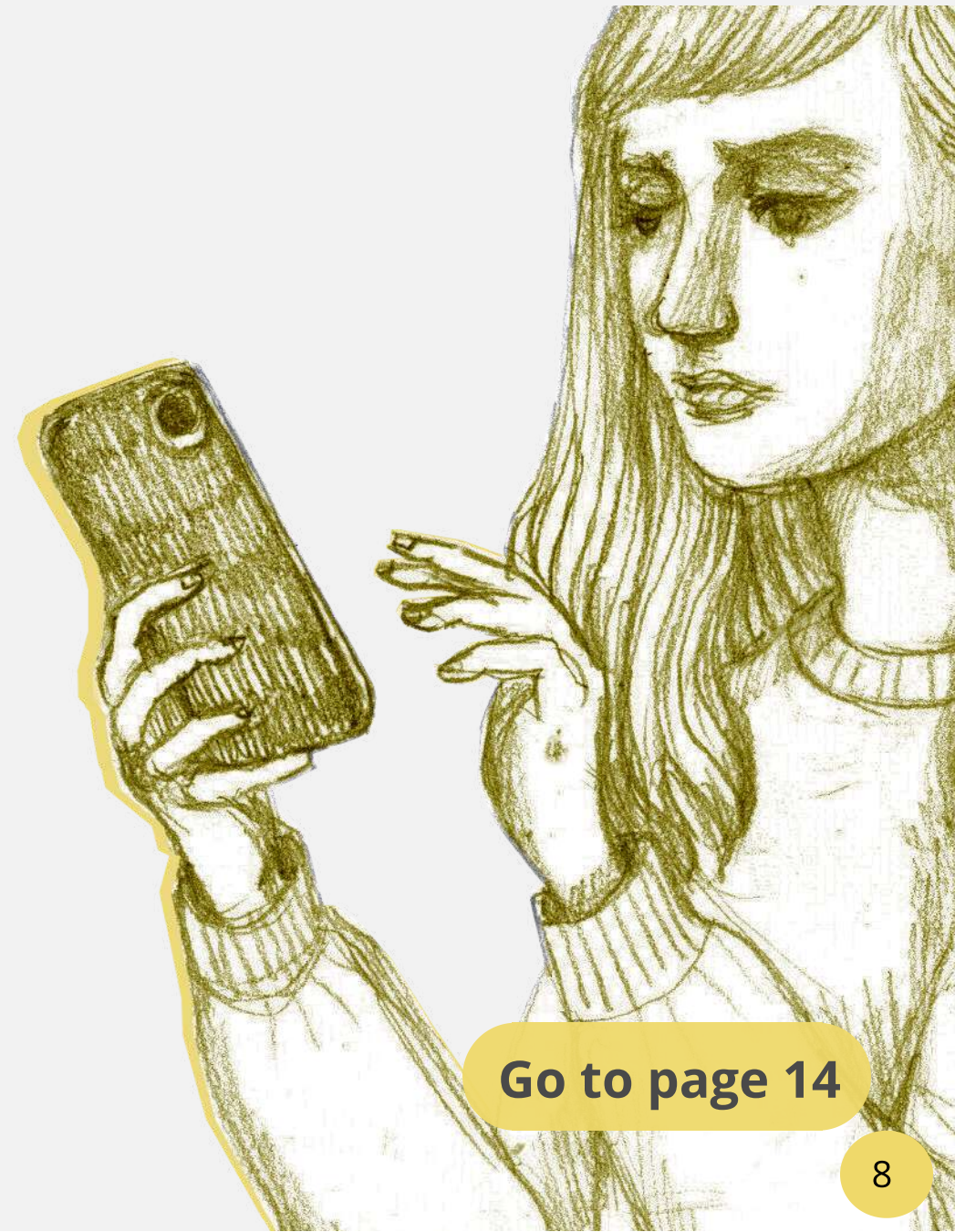
“recycled materials, eco-design, sustainable technology...”



**CONTINUE**

Maja's trembling fingers trace the contours of her phone case, feeling every microscopic ridge and valley in the supposedly biodegradable polymer, heavier in her palm than its 6.2 ounces would suggest.

"I need to learn more about this situation and how they really live over there. What better source than a local?" Through the production of the documentary, she obtains Amani's contact details. She decides to contact him.



**Go to page 14**

Maja goes to the repair shop, where she watches the technician open her phone with a plastic tool. There are traces of electronic residue on his fingernails.

"Manufacturers design these to be replaced, not fixed," he says, removing the bloated battery and inserting a new one. "Planned obsolescence. But this'll give you another year, maybe two."

Maja was perplexed: "Planned obsolescence seems to be accepted quite easily by the majority of people...". The technician scoffed: "Is it that they accept it or that they are not aware that it exists?" She takes a glance at her phone before thanking the technician and leave.

On the bus home, her phone buzzes. She reads news: a Geloxy CEO boasting about "sustainable technology," followed by photos of Ghanaian e-waste, with children picking through shattered electronics, black smoke rising. The contrast leaves her dizzy, her thumb hovering over the screen.



**CONTINUE**



### **Scientific Pop-up:**

The world generated a record 62 million tonnes of electronic waste in 2022, an 82% increase over 2010. Less than a quarter was properly collected and recycled, leaving an estimated \$62 billion worth of recoverable natural resources simply discarded.

(UN Global E-Waste Monitor, 2024)

That night, sprawled on her purple comforter, Maja tumbled through Wikipedia's history of batteries, from ancient Baghdad clay jars to today's lithium cells. A link led her to cobalt mining in Congo.

She read, horrified: orange-tainted water, razed forests, crater-pocked landscapes, and children with bleeding hands sorting razor-sharp rocks.

Each paragraph peeled back another layer of the technology she held daily.

There was a photo of a young miner, Amani, his face streaked with sweat, a red bandanna masking his mouth, eyes narrowed against the sun's glare.



**CONTINUE**



### **Scientific Pop-up :**

The DRC holds approximately 70% of the world's known cobalt reserves and produces around 74% of global supply. Without Congolese cobalt, the lithium-ion batteries powering the world's phones, laptops and electric vehicles could not be manufactured at the current scale.

(RAID & AFREWATCH, 2024)

Maja enlarged the image, studying the lines of exhaustion etched onto his forehead. She wondered if he was the same age as her.

She glances at her phone, suddenly heavy in her palm. Each repair now means more than just saving money. One less demand for new minerals, one small break in the chain linking her bedroom to distant suffering.

The question haunts her like a persistent shadow: Is this enough? She decides to find out more about the situation. After an intensive search online, she finds Amani's contact details and decides to reach out.

**Go to page 14**



Maja clicks "purchase" on a refurbished GeloxyPro S8 listing. When it arrives, she unwraps the recycled packaging to find a nearly flawless device. She observes that only tiny scratches are visible at certain angles, betraying its pre-owned status. Satisfied but curious, she researches refurbished electronics late one night.

On a forum called TechEthics, where experts analyse supply chains, a username stands out: KolweziWitness. His profile photo shows rust-stained hands with cracked skin and darkened cuticles.



**CONTINUE**



### **Scientific Pop-up :**

The DRC holds approximately 70% of the world's known cobalt reserves and produces around 74% of global supply. Without Congolese cobalt, the lithium-ion batteries powering the world's phones, laptops and electric vehicles could not be manufactured at the current scale.

(RAID & AFREWATCH, 2024)

"I dig what powers your scrolling," writes Amani from a dimly lit internet café where ceiling fans stir the humid air three continents away. "Where I stand, the earth bleeds.

Thousands of hand-dug pits pockmark what was once a forest. Metal dust settles on cassava leaves like orange snow. When rain comes, sludge the colour of infected wounds flows where children fill plastic jugs for drinking."

Maja's throat constricts as she traces invisible connections between her manicured fingers and distant soil stained with heavy metals. "Our lives are polar opposites and yet, I cannot help but thinking I am part of this problem.

His problem." she mutters to herself. The blue light of her screen illuminates her face in the darkness of her bedroom. She decides to exchange more with Amani to find out about his situation.

**CONTINUE**

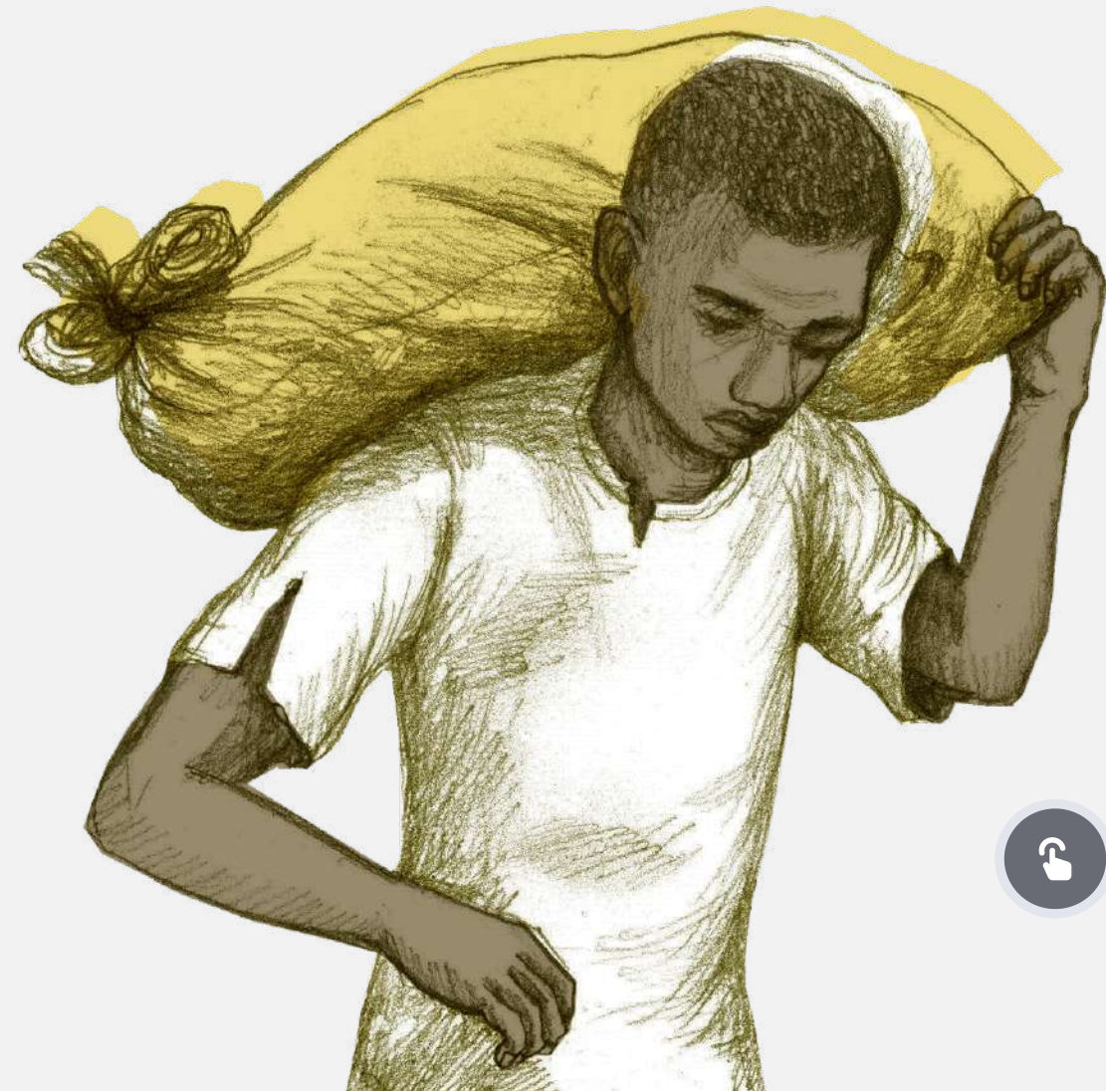


At 4:47 PM, Maja's phone buzzed with the international notification: "Message received from +243 ...". The message began in careful English, Amani's words remarkably formal but edged in hesitance, as if each syllable were a fragile coin that might break in transit:

"Hello. You asked about my work. I want to answer... but who are you?"

She replied, her fingers sweating slightly, then scrolled back to reread his introduction. Over the next several evenings, their correspondence fanned out: Maja asking, Amani describing what it felt like to work in a cobalt mine, what happened when the rains arrived too early, whether he ever saw himself leaving Kolwezi.

**CONTINUE**



Somewhere in the midst of this digital chain, Maja started a document titled “Interview with a Cobalt Miner.” She documented all the major observations Amani shared during their exchanges.

Every morning before his shift, Amani slips past the Musonoï River at dawn, its surface an oily mosaic of sickly green that turns rusty-red in the first rain.

Low-hanging mist clings to twisted reeds on the banks, and the faint clatter of his neighbour scrubbing clothes drifts over the water’s edge since there is no other place to wash.



**CONTINUE**

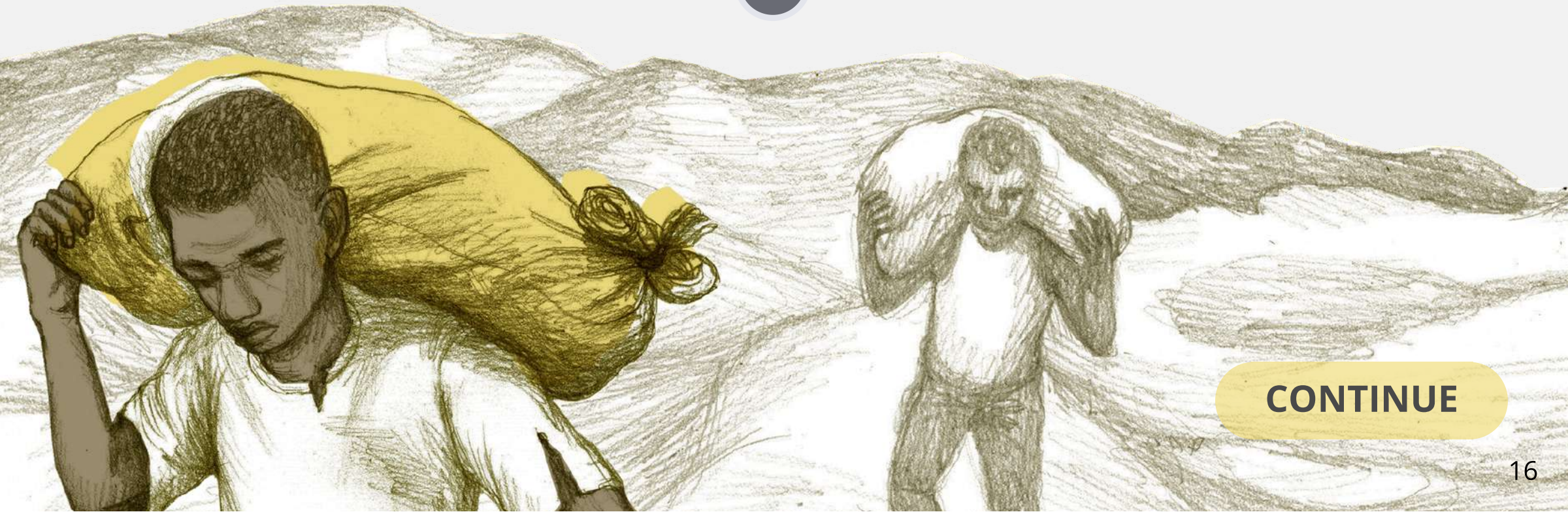


**Scientific Pop-up:**

At least 22 scientific studies confirm that rivers, lakes, streams and wetlands near Kolwezi's cobalt and copper mines are severely polluted by mining activity.

(RAID & AFREWATCH, 2024)

Every day, Amani shoulders a battered plastic jerrycan, bought for 200 francs, and sets off on the forty-minute walk to the borehole the mining company sunk two years ago. The concrete slab around the pump is chipped and stained; on dry days, the borehole yields only a trickle, and he returns with the river's murky water anyway, boiling it over an open flame in hopes of driving out unseen poisons.



**CONTINUE**



### **Scientific Pop-up :**

99% of residents near Kolwezi's mines who relied on fishing or agriculture reported dramatically decreased yields, including fewer and smaller fish, and crops rotting when irrigated with polluted water.

(RAID & AFREWATCH, 2024)

A few fields beyond, his aunt's half-hectare plot lies limp under a steel-grey sky. Where cassava once flourished in neat rows, stunted stalks twist skyward, their yellowed leaves curling from some invisible blight.

Sweet potatoes heave against cracked earth, their tubers half-rot, blackening underground. Sugar cane shoots stand ghostly white and thin.

Last season, entire patches of cassava went rotten before they could be harvested; rumours swirl among neighbours of the same fate in their fields. Now his aunt scours the market stalls, dusty piles of maize, lump-sized yams, overpriced rice, and spends money she doesn't have.

Amani stretches his meagre earnings to buy a two-euro bag of grain, but it vanishes in days, and his aunt has begun skipping the midday meal.

**CONTINUE**

Describes the lives of others, like Amani...Three streets down, empty lots yawn where weathered houses once stood. Amani recalls the Musans in the corner house with the bright-blue gate: a father, mother, four children, and a grandmother who tended chickens in the yard.

One morning two years ago, a mining agent handed them papers and gave them two weeks to leave. The compensation check was barely enough for a shack on the edge of town with no running water, unreliable electricity, and no school within walking distance.

**CONTINUE**



The father still descends into the same mine that took his home.

"I have no choice," he told Amani, eyes rimmed with orange dust.

"Isn't there something that we can do? To ease our way of living?", replied Amani.

His father, a sad look in his eyes, tells him: "There is one. But I do not wish for you to follow the path I am forced to take."

Closer to the city centre, the neighbourhood of Cité Gécamines edges toward oblivion beneath the gaping maw of an expanding open pit. The red earth creeps inch by bloody inch, swallowing streets and front yards. Rumour has it that 39,000 people live there now; Amani, thinking out loud: "How many will remain there soon?"

**CONTINUE**

On his way to the pit each morning, he passes children crouched by the roadside, their clothes stained rust-red as they sift through gravel with bare hands. Tiny picks and plastic bowls sit by their knees as they separate cobalt nodules from ordinary rock.

The youngest, no more than nine, moves methodically, her small fingers trembling.

He recognises her, she is the daughter of the man who died in last year's collapse.

Her mother squats further down the road, elbows submerged in a basin of ore, her face stoic under the same fierce sun.

**CONTINUE**



Something tightens behind Maja's ribs as she writes her article. The words blur slightly on the screen. Her bedroom suddenly feels both too small and impossibly distant from the world he's describing.

She hesitates over her laptop.

She feels there is a lot to process and is unsure what to do. Should she close it? Let the horror settle somewhere manageable in her mind? Or keep going? Type another question?

The cursor pulses in the message box; a steady, patient heartbeat, as Maja inhales, deciding.

### MAJA'S CHOICE



Maja feels overwhelmed. Go to  
page 22



Maja researches the issue and  
talks to others. Go to page 27



**Scientific Pop-up:**

An estimated 40,000 children work in life-threatening conditions in mines across southern DRC, exposed to violence, extortion and intimidation.

(Save the Children, 2023)

The week after her exchanges with Amani, Maja's screen glows until 2 am nightly. Seventeen tabs chronicle horrors: acid-poisoned rivers, dust-covered children, corporate greenwashing.

Her eyes burn. Her notes multiply. "Research," she tells herself, as if accumulating these terrible facts might somehow crystallise into action. It doesn't.

By Thursday, seventeen tabs sit open on her laptop, untouched. Her thoughts swirl into white noise. She slams the laptop shut, escapes into mindless streaming for an hour, feeling momentary relief before the guilt returns.

Now she knows, she is informed, but she also feels trapped in a grip of worry that leads nowhere... it isn't apathy, but finding out and taking action are two very different things. Taking action seems hazy and confusing to her, even if it isn't impossible...



**CONTINUE**



### **Scientific Pop-up:**

Anxiety about climate change can be a healthy, practical response; it alerts us to danger and can motivate action. But because the climate crisis is so complex and lacks a clear solution, anxiety can quickly become too intense and overwhelming, tipping from motivation into paralysis.

(Hickman et al., The Lancet, 2021)



The next day, she meets Zach, her best friend and classmate, at the campus café.

He glances at the shadows beneath her eyes.

"You look wrecked," he says, sliding a coffee toward her.



**CONTINUE**

**Scientific Pop-up:**

The human brain is not designed to process global-scale suffering in real time. Constant exposure to competing crises and unresolved disasters leads to cognitive overload, which creates fertile ground for apathy rather than action.

(Frontiers in Psychology, 2022)



"You have no idea...let me fill you in on this, just know that it may take a while." Maja cradles the warm cup and tells him everything: the mining, Amani, her late nights down research rabbit holes. Her voice catches when she describes feeling paralysed by the scale of it all.

Zach listens, chin propped on his fist. When she finishes, he nods.

**CONTINUE**



"Start small," he says finally. "Keep your phone longer. Choose repair. Support better companies."

She exhales. That feels possible.

"Or talk about it," he offers, tapping her notebook. "Most people have no idea where these materials come from. Conversations change things, too."

Maja stirs her coffee, considering this. There is not a binary choice between action and inaction, but a spectrum of engagement. "You are right. We don't change the world with just good intentions. But words that come from them have an impact that can spread to others."



**CONTINUE**



### **Scientific Pop-up:**

Research shows that one-to-one conversations between climate activists and people who are concerned but inactive significantly increase the non-activist's knowledge, sense of efficacy, and intention to act. The most effective conversations combine the seriousness of the crisis, the availability of solutions, climate justice framing, and concrete local opportunities for engagement. (Fine, npj Climate Action, 2024)

She goes home feeling lighter. The burden shared weighs less. At her desk, she reopens Amani's messages, scanning not for problems but for solutions: fair-trade certification, supply chain transparency, repair legislation.

Some she can support through purchases, others through conversation. The gulf between caring and acting narrows to a single step she can take.

### MAJA'S CHOICE



Maja discusses her findings with others. Go to page 27



Maja acts by becoming a responsible consumer. Go to page 32

Maja, being in a Master's degree on Biology, decides to forward Amani's messages to her environmental science group. They decide to conduct research on the topic. What she thought was just about her phone suddenly expands.

Eight kilograms of cobalt in every electric vehicle battery. The quiet, zero-emission cars championed across Europe, by cities, her university, and governments, as the green solution. She had never questioned what was inside them or where it came from.



During her Environmental Ethics class, she raises her hand. Her voice cracks as she speaks. "The problem isn't just fossil fuels, it's how we're solving it."

Her classmates turn to look at her. "We think we can buy our way to a clean future, but someone else pays the real cost. Someone who lives far away from our cities..."

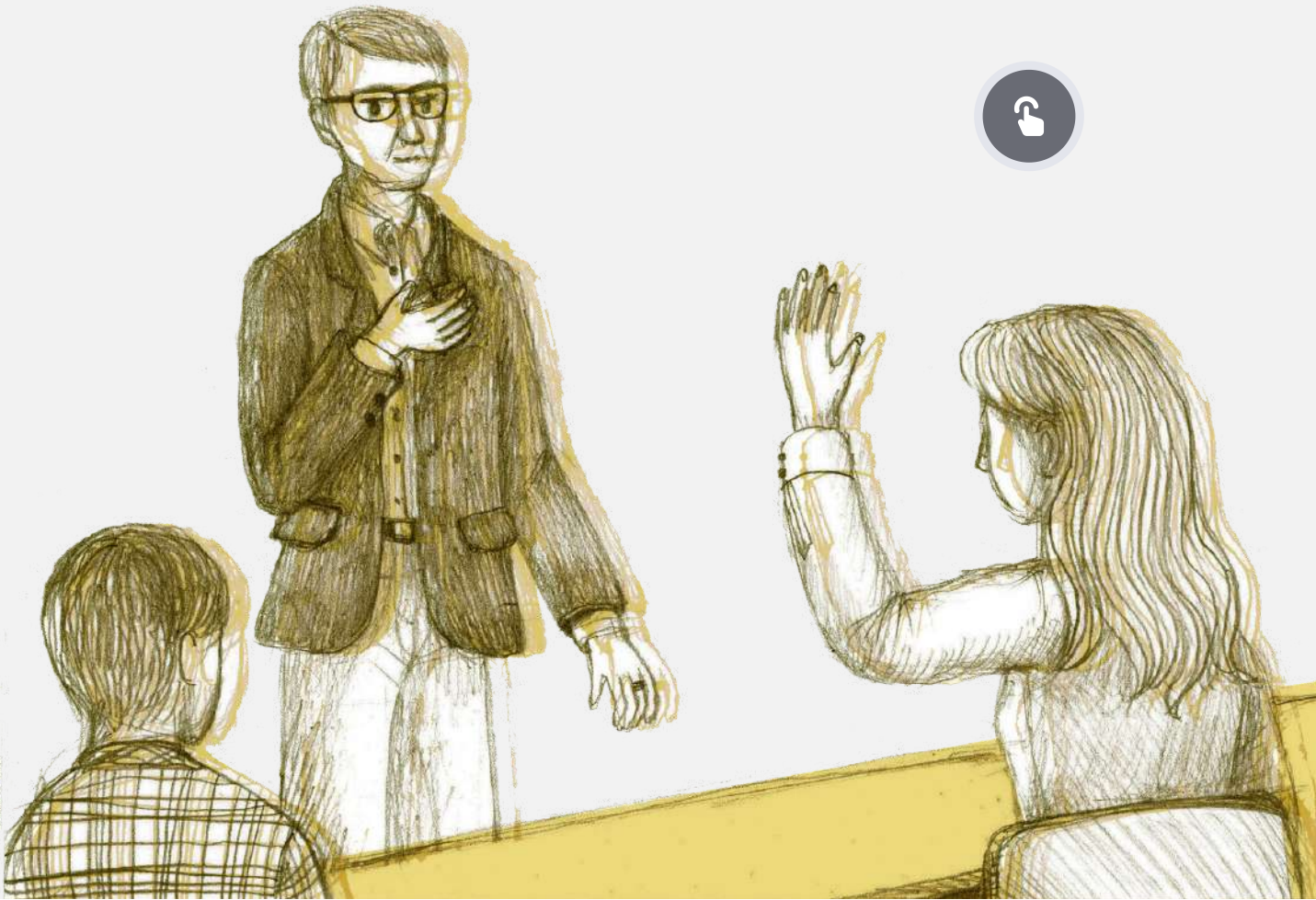
**CONTINUE**



### **Scientific Pop-up :**

In 2023, 71% of all cobalt mined globally was used to produce electric batteries, 45% for electric vehicles and 26% for portable electronics like phones and laptops. Demand is projected to increase fourfold by 2030.  
(Cobalt Institute / Statista, 2023)

Professor Lin, grey-haired with wire-rimmed glasses that catch the fluorescent light, doesn't look surprised. He has been teaching this for twenty years. He scribbles two phrases on a yellow Post-it and slides it across to her after class: "extractive imperialism. digital colonialism."



She writes them in her notebook and sits with them. The idea that colonialism didn't end but evolved, shed its flags and its governors, and rerouted itself through supply chains, sustainability reports, and the quiet, unquestioned assumption that some places exist to provide what other places consume.

**CONTINUE**



### **Scientific Pop-up:**

The DRC's cobalt mining region is described by UN experts as “a sacrifice zone”, an area where populations suffer devastating health consequences and human rights abuses from living in heavily contaminated areas, while the companies benefiting operate thousands of miles away.

(RAID & AFREWATCH, 2024)

Maja opens the RAID report; with every page, her eyes widen in a mixture of surprise and fear. These are not shady dealings hidden in the grey areas of the economy, but the main suppliers to some of the world's leading car manufacturers.

The same corporations are trumpeting their net-zero pledges in glossy advertisements. The same ones labelling their cobalt "clean" while tailings dams breach and sulphuric acid seeps into drinking water.

All in a country where environmental regulations exist on paper but collapse under the weight of insufficient enforcement resources.



**CONTINUE**



### **Scientific Pop-up:**

The RAID & AFREWATCH report documents at least 14 significant toxic incidents at five major cobalt mines near Kolwezi, including tailings dam breaches and sulphuric acid spills, with communities reporting inadequate clean-up. National regulatory agencies, underfunded and under-resourced, are unable to enforce the DRC's own environmental laws.

(RAID & AFREWATCH, 2024)



Each conversation pulls on another thread.

Maja sits cross-legged on her bed, turning her phone over in her hand. The screen reflects her frown back at her. Behind the polished sustainability reports and green marketing lies a reality she can no longer unsee:

Mines expanding in distant countries, waste accumulating where Brussels consumers never look, minerals travelling thousands of miles to become the device now warming in her palm.

The word "SUSTAINABLE" suddenly feels hollow.

**CONTINUE**

A truly sustainable future would work for everyone, for both Europeans reducing their carbon footprint and for Congolese miners living beside toxic pits. These aren't separate issues; they're opposite ends of the same supply chain.

Nothing about her sleek phone reveals what it required to exist. Perhaps that's precisely the point.

She considers her options: change her own consumption habits, advocate for repairable technology design, or address the extractive supply chains themselves.

Each path leads somewhere different. Each begins with a choice.

### MAJA'S CHOICE



Maja becomes a responsible consumer. Go to page 32



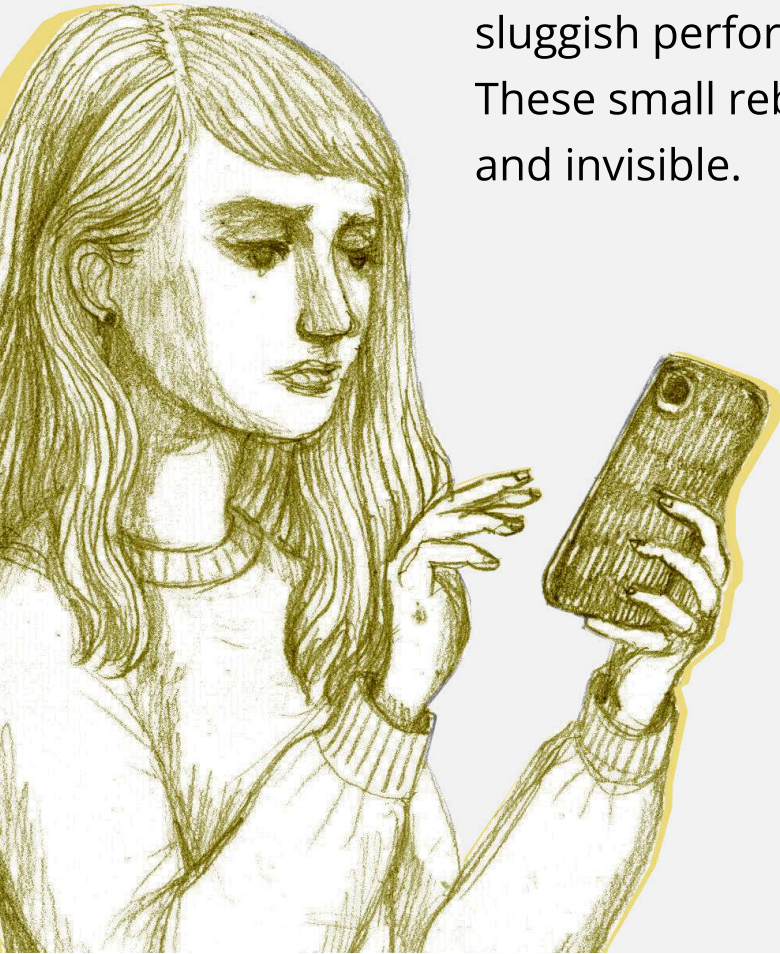
Maja advocates for "The Right to Repair". Go to page 35



Maja promotes a fairer supply chain. Go to page 37

Maja decides that she can't change the system, but she can act anyway. When it comes to new phones, she wants to promote refurbished or repaired phones as sustainable solutions. At dinner parties, she catches herself becoming that person: the one who asks, "Have you tried fixing it?" when friends complain about cracked screens or sluggish performance.

These small rebellions against planned obsolescence matter in ways both measurable and invisible.

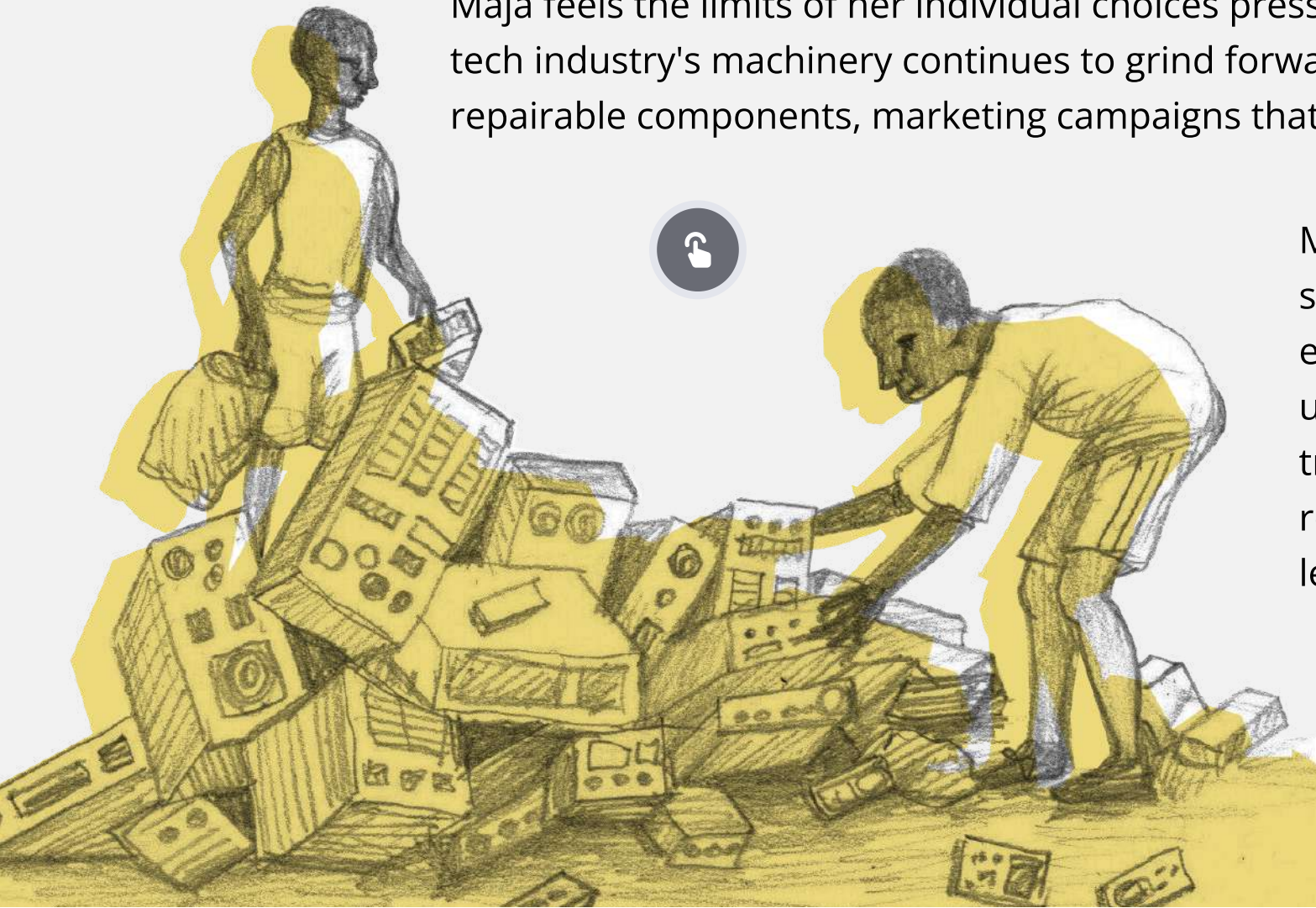


Each gram of cobalt left undisturbed means one less handful of toxic dust in Kolwezi's air.

Each refurbished or repaired phone represents a tiny decrease in the mountains of e-waste accumulating in landfills across the global south.

**CONTINUE**

Yet some nights, scrolling through news of record-breaking smartphone sales, Maja feels the limits of her individual choices pressing against her like walls. The tech industry's machinery continues to grind forward: sleeker designs, less repairable components, marketing campaigns that transform wants into needs.



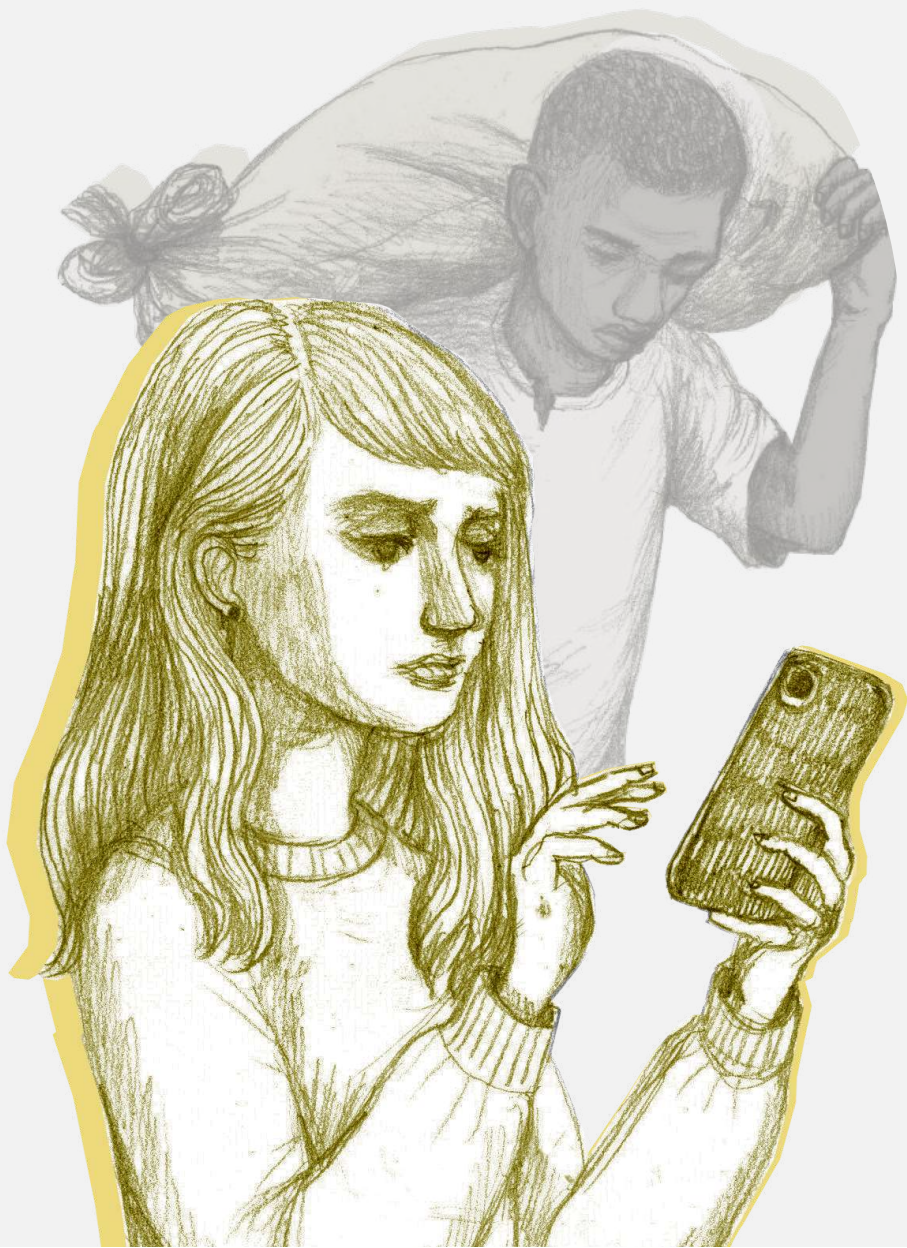
Meanwhile, battery demand surges as green energy solutions expand, creating an uncomfortable paradox: the transition to renewable power requires more extraction, not less.

**CONTINUE**

**Scientific Pop-up:**

Cobalt demand could increase anywhere from 6 to 30 times current levels by 2040, depending on the direction of battery chemistry evolution and the pace of climate policy implementation.

(IEA, 2021)



Her actions aren't meaningless; they're seeds. Consumer awareness grows slowly, then suddenly, like bamboo that seems dormant before shooting skyward. Companies notice shifting patterns; policymakers respond to constituent concerns.

Maja comes to understand that her individual choices matter most as catalysts for collective action. They can initiate conversations that ripple outward, demanding cooperation across borders and between the hands that extract resources and those that hold the finished products.

# THE END



The equation suddenly seems obvious: longer-lasting devices mean less mining.

Maja finds herself staying after Professor Lin's sustainability lecture to ask about systemic approaches.

Two weeks later, she's pinning "Right to Repair" buttons on backpacks at the student union.

Their manifesto is simple: people deserve access to tools, parts, and knowledge to fix what they own.



**CONTINUE**



### **Scientific Pop-up:**

Throwing away goods that could simply be repaired generates 35 million tonnes of waste every year in the EU alone. In a 2020 survey, 77% of EU consumers said they would rather repair their goods than buy new ones, but end up replacing them anyway, because repairs are too expensive or simply unavailable.

(European Parliament, 2024)

At the department's spring symposium, Maja stands before a projected image of a Fairphone's exploded-view diagram: battery, screen, and camera modules all designed for replacement. Her voice grows stronger as she explains how the average phone is discarded after just two and a half years, not because it has stopped working, but because it has been designed to be impossible to fix.

Their campus campaign catches attention beyond university walls. When the European Parliament votes on repair legislation that summer, Maja's student group receives an invitation to the “Espace Léopold” in Brussels to witness the proceedings.

The new directive requires manufacturers to provide spare parts for a decade and design for disassembly. Such policies ripple outward. When repair shops flourish on every corner, and replacement parts arrive overnight, consumers naturally keep phones longer without conscious sacrifice.



# THE END



### **Scientific Pop-up :**

In April 2024, the EU adopted the Right to Repair Directive, which entered into force on 30 July 2024. Under the new rules, sellers must prioritise repair over replacement during the legal guarantee period, and consumers have the right to request repairs for smartphones and other products even after the guarantee expires. Member states must apply the rules from July 2026.

(European Parliament, 2024)

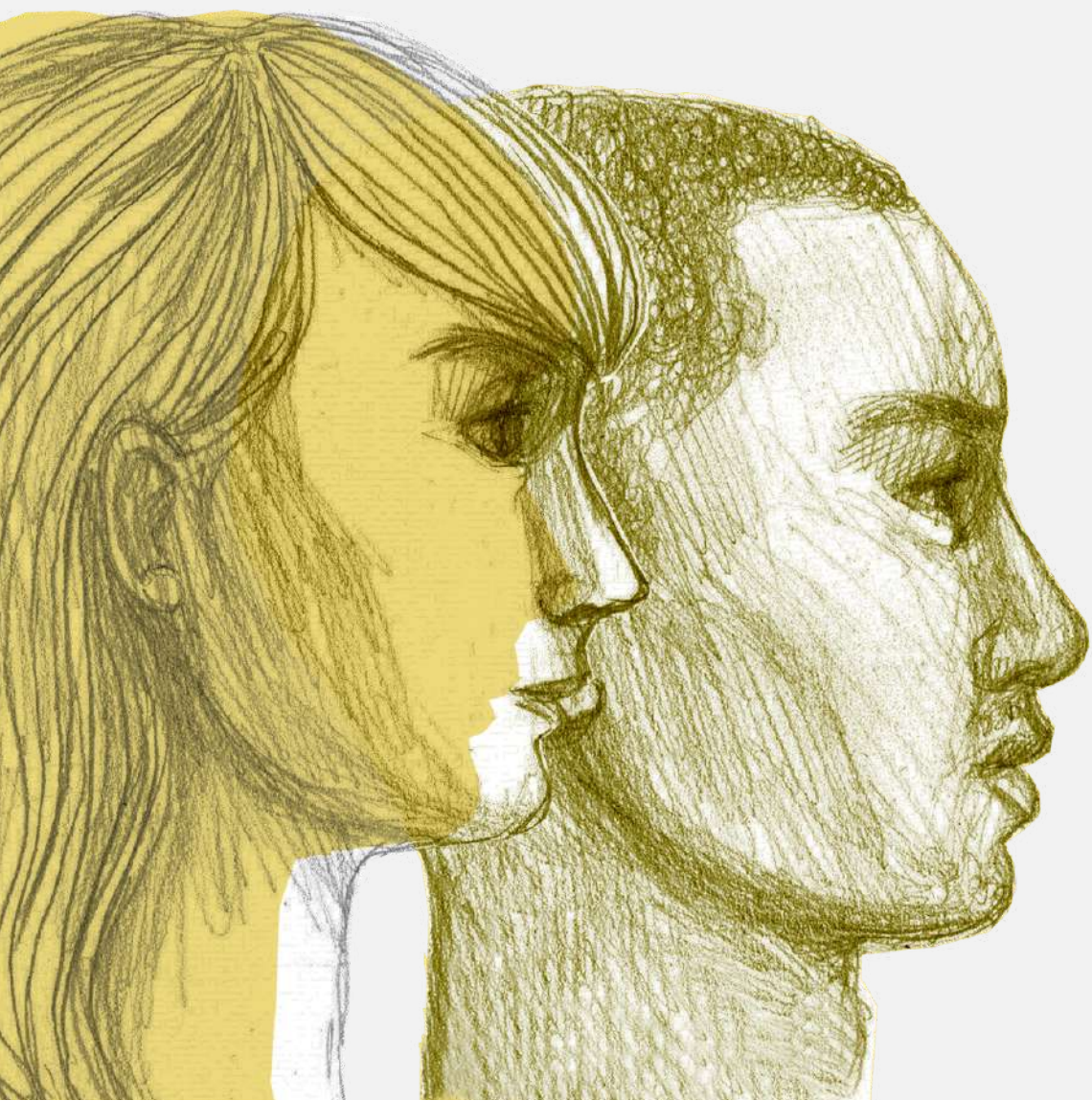
The cobalt fuelling the world's devices flows from Congolese soil, yet those living in mining regions often subsist in unchanged poverty.

Studies from Rights and Accountability in Development and African Resources Watch reveal the twin shadows of industrial mining: contaminated landscapes and fractured communities throughout Kolwezi.

"We don't want a world without cobalt technology," Amani writes one evening.

"We want dignity while providing it, protection from toxins, fair compensation for our labour, and respect for the land we'll inherit after the corporations leave."

**CONTINUE**



"Your words will be transmitted and talked about. I will make sure that people understand your struggles to have a glimpse of hope for you and your people." said Maja to Amani through the phone.

These words catalyse Maja's involvement with her campus "Ethical Supply Chain Initiative".

Their campaigns illuminate the human geography of battery components and pressure tech giants to adopt transparent sourcing and equitable practices.

**CONTINUE**

The confrontation with Maja gave Amani a glimmer of hope that perhaps things might change in Kolwezi too. Amani joins forces with other miners to form a co-operative, so that their collective voice can strengthen their negotiating position and pool resources for safety equipment and environmental remediation projects.

Such grassroots efforts face formidable obstacles. Supply chains stretch across continents, obscuring accountability through layers of contractors and subsidiaries.

Yet these small rebellions recalibrate power dynamics.

The convergence of conscious consumers, responsive corporations, regulatory frameworks, and empowered mining communities creates pathways toward supply networks that prioritise both carbon reduction and human dignity.



**CONTINUE**



### **Scientific Pop-up:**

Fair trade certification for artisanal miners is one of the few proven mechanisms for delivering higher and more stable prices to mining communities. Fair Cobalt Alliance standards require safe working conditions, environmental protections, and democratic governance of mining cooperatives as conditions of certification.

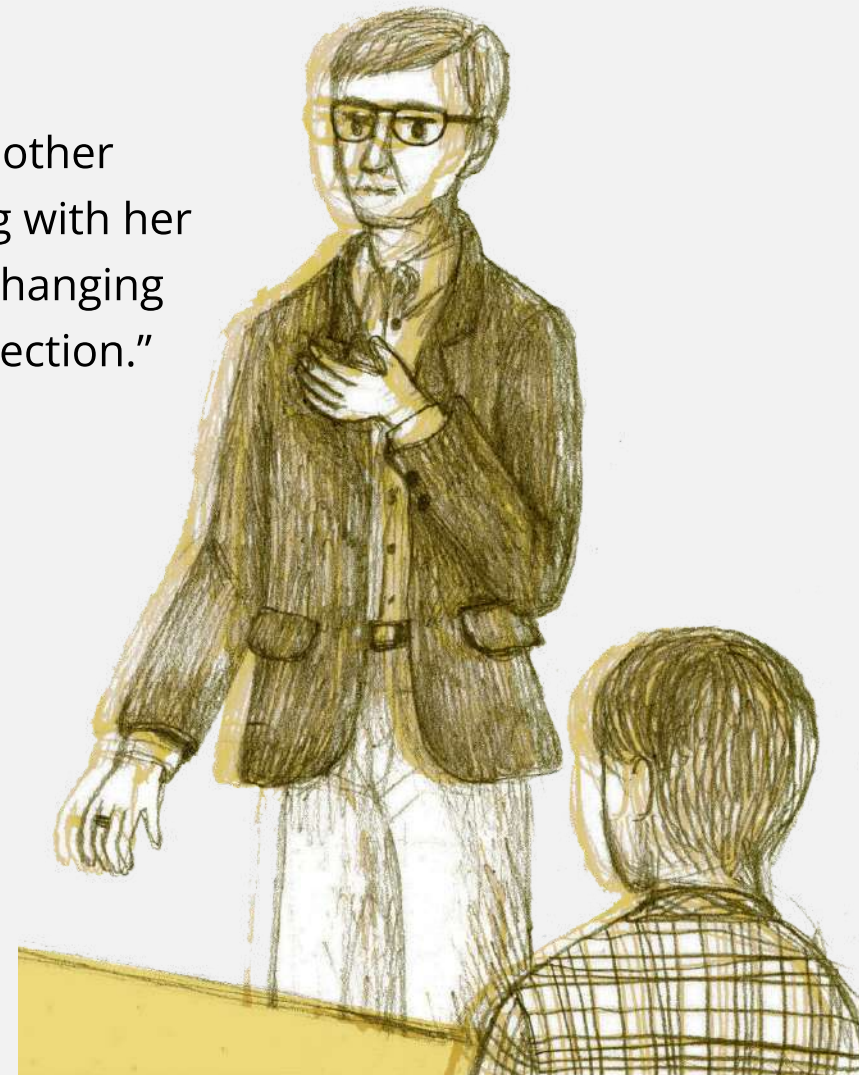
(Fair Cobalt Alliance, 2024)

"We can't build solar panels and wind turbines without cobalt and other minerals," says Maja in class, sharing her newfound understanding with her classmates, "what matters is not stopping mining altogether, but changing the way it is done, ensuring that the profits do not all go in one direction."

She thinks of something Professor Lin said last semester about environmental colonialism:

"How convenient that the batteries powering Europe's clean energy revolution leave their toxic footprint in countries that barely contributed to climate change, countries whose citizens might never own the devices their minerals make possible."

The class listens in silence to her thoughts.



**CONTINUE**



True sustainability demands that environmental progress elevate rather than exploit those at the source of transition materials. The class applauds, Maja feels she has found her voice, and her place in the world and amongst others.

She thinks of Amani, of the bond that has formed between them, of her newfound awareness, and realises that what can transform progress into an empowering force, rather than a merely exploitative one, is when connections are forged between distant points in the supply chain...

Only in this way, she tells herself, can Brussels and Kolwezi, Europe and the Congo, become aware of their shared future.

**THE END**



# REFLECTION QUESTIONS

1

7

3

5

2

4

6

8

Next



**Think about the device you are reading this on.**

**Do you know where the materials inside it came from?**

**Does not knowing feel comfortable or uncomfortable, and what does that tell you?**



**Maja nearly does nothing. What was the turning point for her?**

**Have you ever had a conversation like the one she had with Zach that shifted something for you?**



**Have you ever felt paralysed by  
information about climate change or  
global injustice, knowing something was  
wrong but not knowing where to begin?**

**What helped you move through it, or  
what is still keeping you stuck?**



**When did you last replace a phone, laptop or other device?**

**Was it because it stopped working, or because something newer was available?**

**What would it take for you to keep it longer?**



**The concept of a sacrifice zone describes places that bear the environmental cost of other people's consumption.**

**Can you think of other sacrifice zones, near or far, that make your own life possible?**



**Amani says: "We don't want a world without cobalt technology. We want dignity while providing it."**

**What would it actually take, politically, economically, personally, for that dignity to be possible?**



**Maja realises that individual choices matter but are not enough on their own.**

**Where do you draw the line between personal responsibility and systemic responsibility?**

**Who do you think should carry more of the weight?**



**Electric cars, solar panels and wind turbines are presented as climate solutions.**

**After reading this story, does that framing feel complete to you? What is missing from it?**

## **FURTHER RESOURCES**

## **COBALT MINING & ENVIRONMENT**

Van Woudenberg, A., & Umpula, E. (2024). Beneath the green: A critical look at the cost of industrial cobalt mining in the DRC. RAID & AFREWATCH. <https://raid-uk.org/wp-content/uploads/2024/03/Report-Beneath-the-Green-DRC-Pollution-2024.pdf>

Amnesty International. (2023). Powering change or business as usual? Forced evictions at industrial cobalt and copper mines in the DRC. <https://www.amnesty.org/en/latest/news/2023/09/drc-cobalt-and-copper-mining-for-batteries-leading-to-human-rights-abuses/>

Save the Children. (2023). DRC: Cobalt mines, child labour and the green transition. <https://www.savethechildren.net/stories/drc-cobalt-mines-child-labour-and-green-transition>  
Earth.org. (2024). The environmental impacts of cobalt mining in Congo. <https://earth.org/cobalt-mining-in-congo/>

Wilson Center. (2022). The DRC mining industry: Child labor and formalization of small-scale mining. <https://www.wilsoncenter.org/blog-post/drc-mining-industry-child-labor-and-formalization-small-scale-mining>

**Next**

## **COBALT DEMAND & SUPPLY CHAIN**

Cobalt Institute. (2024). Cobalt market report 2023. <https://www.cobaltinstitute.org/wp-content/uploads/2025/02/Cobalt-Market-Report-2023.pdf>

International Energy Agency. (2021). The role of critical minerals in clean energy transitions. <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>

International Energy Agency. (2024). Global critical minerals outlook 2024. <https://www.iea.org/reports/global-critical-minerals-outlook-2024>

Fair Cobalt Alliance. (2024). Establishing fair trading practices at artisanal cobalt mine sites. <https://faircobaltalliance.org/blog/establishing-fair-trading-practices-at-artisanal-cobalt-mine-sites/>

**Next**

## **E-WASTE & RIGHT TO REPAIR**

European Parliament. (2024, September 16). Right to repair: The EU's actions to make repairs more attractive. <https://www.europarl.europa.eu/topics/en/article/20220331STO26410/why-is-the-eu-s-right-to-repair-legislation-important>

Baldé, C. P., Kuehr, R., Yamamoto, T., McDonald, R., D'Angelo, E., Althaf, S., Bel, G., Deubzer, O., Fernandez-Cubillo, E., Forti, V., Gray, V., Herat, S., Honda, S., Iattoni, G., Khatriwal, D. S., Luda di Cortemiglia, V., Lobuntsova, Y., Nnorom, I., Pralat, N., & Wagner, M. (2024). Global e-waste monitor 2024. International Telecommunication Union & United Nations Institute for Training and Research. <https://ewastemonitor.info/the-global-e-waste-monitor-2024/>

## **CLIMATE JUSTICE & HISTORICAL EMISSIONS**

Evans, S. (2023, November 5). Revealed: How colonial rule radically shifts historical responsibility for climate change. Carbon Brief. <https://www.carbonbrief.org/revealed-how-colonial-rule-radically-shifts-historical-responsibility-for-climate-change/>

**Next**

## **CLIMATE PSYCHOLOGY**

Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E., Mayall, E. E., Wray, B., Mellor, C., & van Susteren, L. (2021). Climate anxiety in children and young people and their beliefs about government responses to climate change: A global survey. *The Lancet Planetary Health*, 5(12), e863–e873.

[https://doi.org/10.1016/S2542-5196\(21\)00278-3](https://doi.org/10.1016/S2542-5196(21)00278-3)

Malboeuf-Hurtubise, C., Léger-Goodes, T., Herba, C., Bélanger, N., Smith, J., & Marks, E. (2022). Eco-anxiety in children: A scoping review of the mental health impacts of the awareness of climate change. *Frontiers in Psychology*, 13, 872544. <https://doi.org/10.3389/fpsyg.2022.872544>

Fine, J. C. (2024). Refining relational climate conversations to promote collective action. *npj Climate Action*, 3, 10. <https://doi.org/10.1038/s44168-023-00091-0>

**Next**



### **This adventure book is a creation of Erasmus+ Green Saga Project**

Funded by the European Union. However, the views or opinions expressed are those of the author(s) alone and do not necessarily reflect the views or opinions of the European Union or the Agency of Youth Affairs. Neither the European Union nor the granting authority can be held responsible for them.

Project code: 2024-2-LT02-KA220-YOU-000293123



**Co-funded by  
the European Union**