

Tackling Climate Change

Practical Actions to Make a Difference

Yesterday's Main Points

1 -Action NOW!

2 -We should be amongst the leaders -
collective power!

3-Mindset change - neurotransmitters,
overconsumption

Main Points for Today

Let's be the ones driving climate action

Ideas and practical tips to take home and put into practice



Now is the Time to Take Climate Action

- ▶ There is a big movement
- ▶ Social tipping point
- ▶ We are the first generation, won't be the last



“Doctor, we need you in Room Planet Earth”

- ▶ Our industry is a big part of the problem
- ▶ Ethical and professional duty
- ▶ Financially privileged → economic clout
- ▶ Respected voice → social clout
- ▶ Trained to evaluate current behavior vs future health consequences
- ▶ Expertise in managing complicated problems
- ▶ **We cannot rely on politicians or new tech to fix this problem**



How can we not give this our very best shot?

Climate Action We Can Take



Actions at Work

- ▶ Say no to gloves



Forced Labour and Human Rights Abuses

This was published 1 year ago

Ansell accused of 'knowingly profiting' from forced labour at Malaysian glove supplier



Chris Barrett

August 10, 2022 – 5:49pm



Share



Singapore: Ansell is being sued in a US court by a group of former migrant workers in Malaysia who claim the Australian personal protective equipment giant "knowingly profited" from alleged forced labour in the disposable glove manufacturing industry.

The 13 Bangladeshi workers say they were trafficked to Malaysia and made to live and work in shocking conditions at single-use glove producer Brightway Holdings, a supplier to Ansell.

NHS rubber gloves made in Malaysian factories linked with forced labour

Exclusive: firms supplying health service allegedly exploit thousands of migrants



Workers at Top Glove and WRP in Malaysia claim they are subjected to forced overtime, debt bondage and withheld wages. Photograph: Teh Eng Koon/AP

- ▶ <https://www.smh.com.au/world/asia/ansell-accused-of-knowingly-profiting-from-forced-labour-at-malaysian-glove-supplier-20220810-p5b8se.html>
- ▶ <https://www.theguardian.com/global-development/2018/dec/09/nhs-rubber-gloves-made-in-malaysian-factories-accused-of-forced-labour>



Great Ormond Street Hospital – reducing single use plastics case study



Staff at Great Ormond Street Hospital reduced use of plastic gloves, and in doing so saved 21 tonnes of plastic and £90,000. The team used internal communications channels to raise awareness and developed a training package to reach all their nursing staff and healthcare assistants. The project changed behaviour and helped deliver health benefits for staff as well as the environment.

SKIN IN THE GAME

Reducing the use of *unnecessary gloves*

Nice
No Intensive Care Environment Reqs



Join our ICU Initiative To

✦ Improve hand hygiene

✦ Reduce unnecessary use of gloves

✦ Improve resource stewardship with financial and environmental benefits

Actions at Work

▶ SMART therapy for asthma

Be **SMART**

Single Maintenance And Reliever Therapy



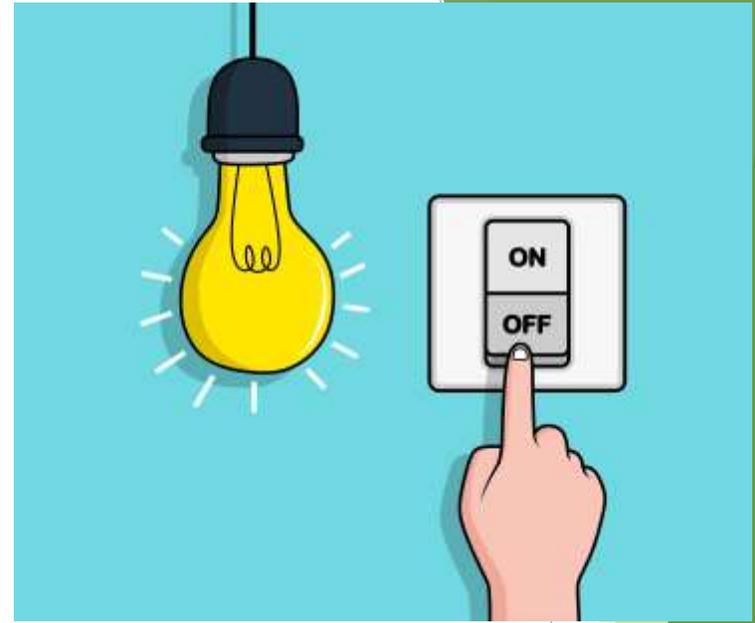
Great news - only 1 inhaler not 2 to control asthma!



Actions at Work

Curb Your Consumption

- ▶ Challenge "open just in case" culture
- ▶ Turn off lights and computers
- ▶ Consider the environmental cost of things
- ▶ Double-sided printing



Actions at Work

- ▶ Travel Less
- ▶ If travel is necessary, OFFSET YOUR CARBON



[Individual Offsetting Options \(linked\)](#)

To receive the **Gift Certificate**, please offset the emissions and then click "Submit".

Estimated Offset Cost (NZD - GST exclusive)

\$50.00

Would you like to offset your footprint?

Let's do it No thanks

Carbon Credit Project

- NZUs – Jacks Valley - Permanent New Zealand Restorative Forest Units (NZUs) produced in Motueka, New Zealand.
- VCUs – Papua New Guinea - Verified Carbon Units (VCUs), produced in an avoided deforestation project in the New Ireland province, Papua New Guinea.

ekos.co.nz

Actions at Work

- ▶ Practice good medication stewardship
- ▶ Talk about disposal



Disposal of Unwanted Medicines Properly

Return your unwanted medicines to your pharmacy for **FREE**



Medication Stewardship

RESEARCH ARTICLE | ENVIRONMENTAL SCIENCES | 



Pharmaceutical pollution of the world's rivers

[John L. Wilkinson](#)  , [Alistair B. A. Boxall](#) , [Dana W. Kolpin](#) , , and [Charles Teta](#)  [Authors Info & Affiliations](#)

Edited by Andrea Rinaldo, School of Architecture, Civil and Environmental Engineering, Laboratory of Ecohydrology, Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland; received August 11, 2021; accepted December 10, 2021

February 14, 2022 | 119 (8) e2113947119 | <https://doi.org/10.1073/pnas.2113947119>

Medication stewardship



New medications - limit initial supply

New Patient Medication

Main Dispensing

GMS: A4

Drug: Atorvastatin 20Mg Tab

Mitte: 90 tabs Period: Amount: 3.33

Directions: use 1 tab OD

Repeats: 0 Options...

Administer: Systemic

Initial Dispensing Period: 14 days Provider Eligible for Co-Payment

Provider: Dr Rebecca Randerson Prescribed Externally

Date of Issue: 13/05/2024 External Provider:

Classification: Frequent Dispense Long Term

Medication Status: Confidential Generic Substitution

LT Rx Expiry: Do Not Upload to MMH

Recommended by a Specialist Patient meets Endorsement Criteria

Specialist: Date Recommended:

Previous Drug:

Interactions



Actions at Work

- ▶ Recycle what you can
- ▶ Right Bins



Medical waste

Don't be an over-includer!



Infectious Waste

- ▶ EXPRESSIBLE BODY FLUIDS
- ▶ SHARPS
- ▶ radioactive, cytotoxic
- ▶ Waste from isolation rooms
- ▶ Receptacles containing body fluids ie discarded lab specimens, cultures
- ▶ Waste from pts known to be suffering from transmissible wound infections ie MRSA

General Waste

- ▶ All other Non-Recyclables:
 - saline moistened cleaning swabs
 - swabs in small surgery
 - Throat sticks, pooey nappies etc
 - Gloves

Make/keep the new system
'attractive'



→ increases acceptance + 'buy-in'



Greening General Practice.

A toolkit for sustainable practice



GP

Heart of the community
Kōhinga Tupu



The Royal New Zealand
College of General Practitioners
Te Whare Tohu Rata o Aotearoa

Healthy Living for Patients / families



Choose Ethical Investments and Environmentally-Responsible providers



Many NZ banks service
+ profit from Fossil Fuel
industry.

KiwiSaver
Poua he Oranga

Not all are ethical providers



What can individuals do to divest-invest?



Divest



Invest



1

Bank accounts

- You can switch your bank account to a provider which doesn't invest in fossil fuels. Most countries have institutions that don't invest in fossil fuels and offer current accounts, savings and loans accounts. Look out for 'ethical banks', 'building societies', or 'credit unions'.

2

Pensions and retirement savings

- The structure of retirement savings can vary, so there is no single process to follow.
- If you're employer or private pension provider manages it, work with them to go through the steps for organisations wanting to DivestInvest.
- A key step is to ask them to offer a fund which meets your investment criteria.

3

Personal Investments

- If you manage your own investments:
 - Decide your criteria for excluding or including companies.
 - Assess where your investments are currently. There are several tools available to check this such as fossilfreefunds.org.
 - Sell any shares that fail to meet your criteria, and switch to ones that do.
- If you have a fund manager:
 - Ask the fund manager to select funds or securities that meet your exclusion and inclusion criteria.
 - Ask them how they incorporate climate risk into their investment process.
 - If they are unable or unwilling to respond adequately, consider switching managers.

350 Bank Statement: Is your bank climate friendly?

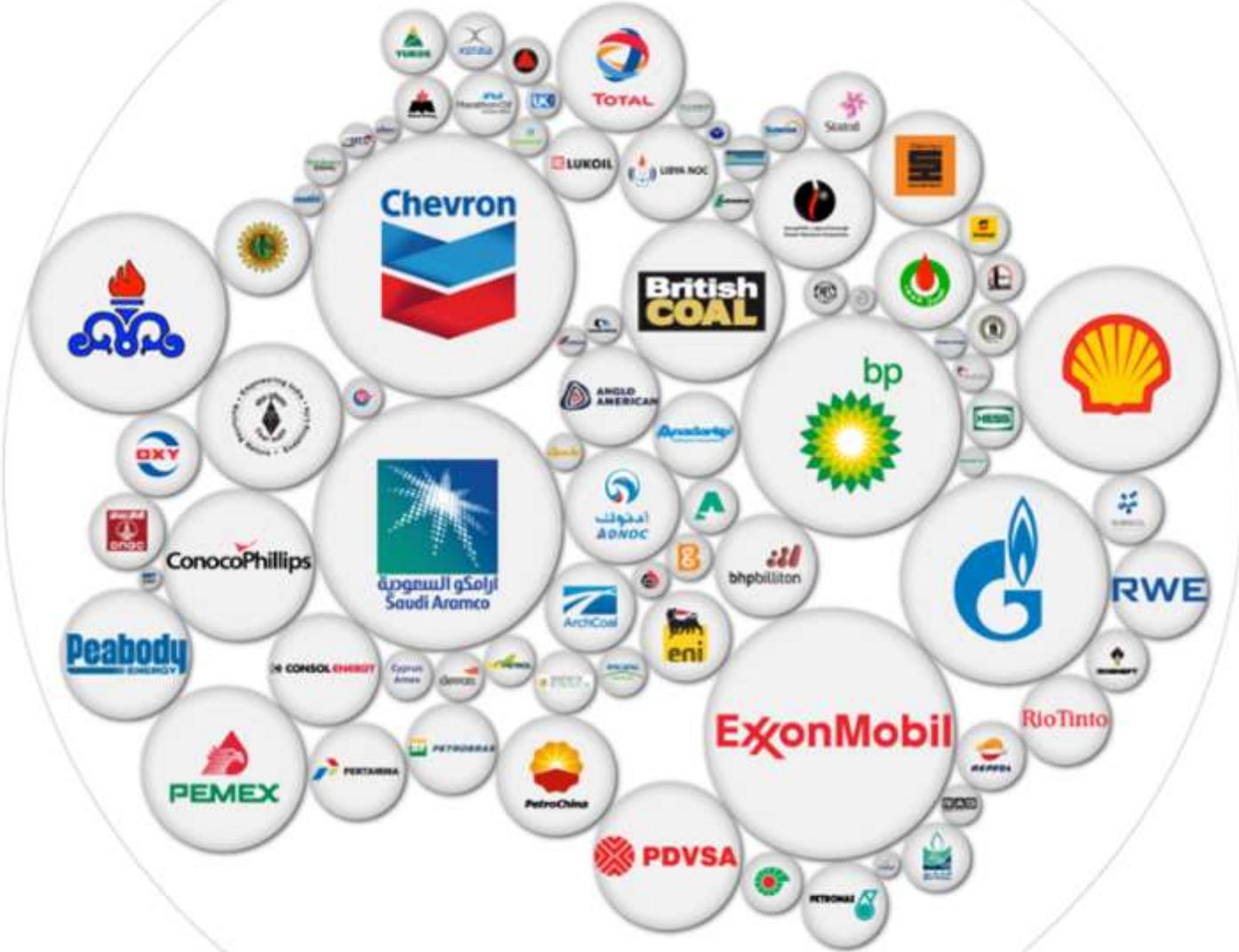
	AMOUNT LOANED TO FOSSIL FUELS <small>(13 Jan 2018 - 31 Dec 2022)</small>	EMISSIONS FROM EXPANSION PROJECTS <small>(CO₂e)</small>	RULES OUT INVESTING IN FOSSIL COMPANIES?	FOSSIL-FREE BANK
 Kiwibank.	\$0	0 t	✓	YES
 The Cooperative Bank	\$0	0 t	✓	YES
 sbs	\$0	0 t	✓	YES
 TSB	\$0	0 t	✓	NO
<small>WESTPAC GROUP, PARENT OF</small> 	A\$9.0B	3B t	✗	NO
<small>NAB, PARENT OF</small> 	A\$14.0B	6B t	✗	NO
<small>COMMBANK, PARENT OF</small> 	A\$15.8B	6B t	✗	NO
<small>ANZ GROUP, PARENT OF</small> 	A\$18.6B	5.3B t	✗	NO
 Rabobank	A\$19.1B	?	✗	NO
 中國銀行 <small>BANK OF CHINA</small>	A\$185.3B	?	✗	NO
 HEARTLAND BANK	?	?	?	NO

‘Aotearoa Bank Statement 2024’

www.350.org.nz/fossil-free-banks/

Further details and letter-template at above address

90 Companies responsible for two thirds of emissions



Actions in your personal life

- ▶ Set a good example:
- ▶ Reusables



Greatist.com

Actions in your personal life

- ▶ No more plastic water bottles (for real!)



Actions in your personal life

- ▶ Carpool
- ▶ Use public transportation
- ▶ Travel actively

Sporti.e.f ou of Trendy

Bruno Le Fevere
Service Technique
Technische dienst

Isabelle Van Den Bossche
Service Juridique
Juridisch dienst

Planorga

CLINIQUES DE L'EUROPE
EUROPA ZIEKENHUIZEN

Rejoins la bike team !
Word lid van het bike team !
biketeam@europenhospitals.be

The advertisement is a vertical poster with a blue header and a green footer. The header contains the text 'Sporti.e.f ou of Trendy' in white. Below the header are two photographs of people riding bicycles. The left photo shows a man in a green jacket and helmet, with the caption 'Bruno Le Fevere Service Technique Technische dienst'. The right photo shows a woman in a white dress, with the caption 'Isabelle Van Den Bossche Service Juridique Juridisch dienst'. The footer contains the Planorga logo, the Cliniques de l'Europe and Europa Ziekenhuizen logos, and the text 'Rejoins la bike team ! Word lid van het bike team ! biketeam@europenhospitals.be'.

Actions in your personal life

Sashiko

- ▶ Mend or repair your broken things



Kintsugi

Photo by [Riho Kitagawa](#) on [Unsplash](#)

Actions in your personal life

► Be a smart consumer

Think about:

- How far has it travelled?
 - How was it produced?
 - How is it packaged?
 - How long will it last?
 - What happens when I've finished with it?
 - What happens to the packaging?
-
- Do I really need it anyway?



Actions in your personal life

▶ Leave the freebies





BOUNTIFUL NEW PARENT PACK
VOUCHER

After you give birth take this voucher into participating pharmacies to receive your **FREE BOUNTIFUL NEW PARENT PACK**

for your nearest stockist scan QR code or visit bountifulpacks.co.nz/collectionpoints

  [bountifulpacksnz](https://www.instagram.com/bountifulpacksnz)



Canesten[®]
Hygiene Laundry Rinse
Antibacterial + Antifungal

Eliminates Bacteria and Fung from your washing **99.9%**

- ✓ Kills persistent stress infections
- ✓ Gentle on fabrics
- ✓ Helps protect the whole family

Regular 1 Litre

CAUTION
KEEP OUT OF REACH OF CHILDREN
DO NOT SWALLOW

GENTLE ON FABRICS

- HARSH ON PLANET

- SHIT FOR SKIN

‘Freebies’ + Vouchers
(for hazardous shit you don’t need)

Café Regenerata

Menu

Serotonin

- Contemplate the sunrise
- Morning yoga
- Bush walks
- Kneading bread dough
- Weighted blanket

Endorphins

- Gardening
- Listen to music
- Watch a movie
- Laughter



Oxytocin

- Sense of belonging
- Somatosensory stimulation (skin)
- Positive warm human-human connections
- Volunteer in your community
- Loving human-pet interactions
- Warm bath

Ethical Dopamine/Nature-centred Dopamine

- Laughter
- Exercise
- Handcrafts
- Supporting others



Share Your Wins



Personal Sustainability



Summary: Climate Actions We can Take Today

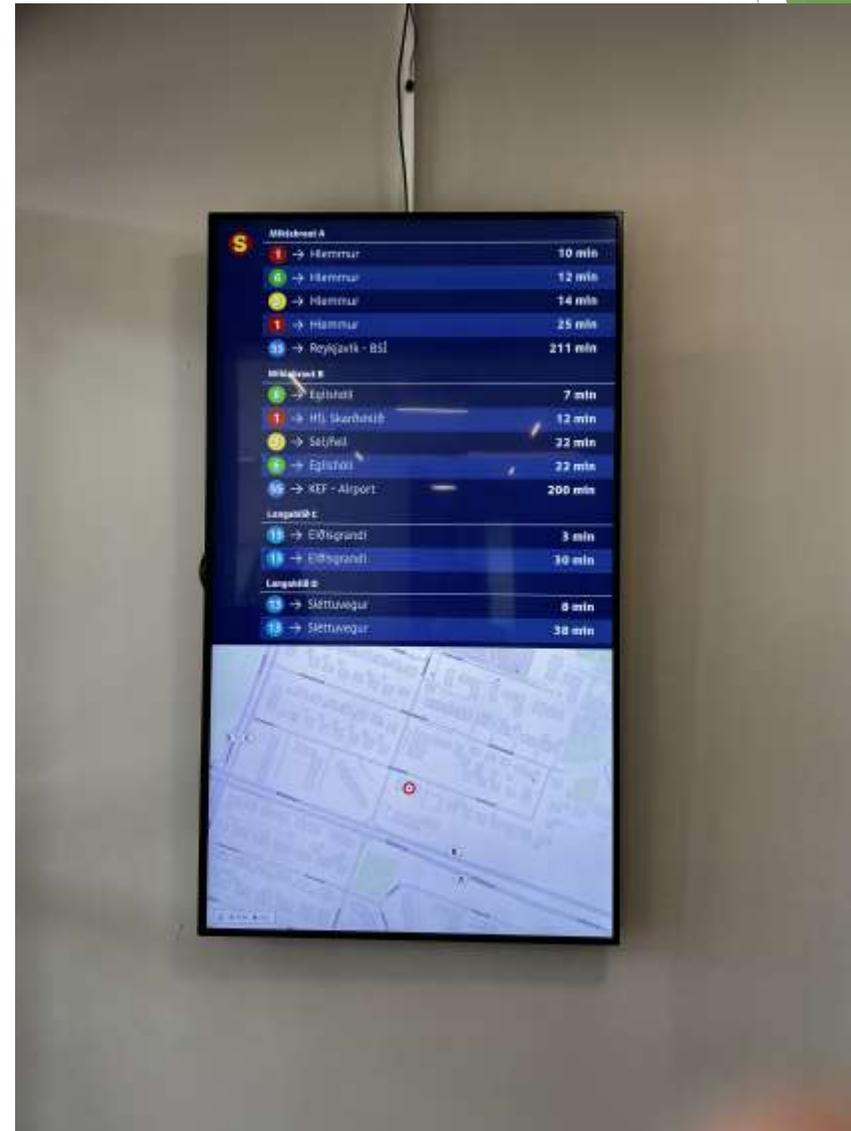
- ▶ No Gloves
- ▶ SMART Asthma therapy
- ▶ Curb consumption
- ▶ Travel less and offset the remainder
- ▶ Good medication stewardship
- ▶ Dispose correctly
- ▶ Travel actively
- ▶ Mend and Repair
- ▶ Leave the Freebies
- ▶ Share your wins
- ▶ Put your money where your heart is!
- ▶ Acknowledge this is a journey and take whatever step comes next for you



By J. Howard Miller - U.S. National Archives and Records Administration, Public Domain,
<https://commons.wikimedia.org/w/index.php?curid=80242715>

Some good examples

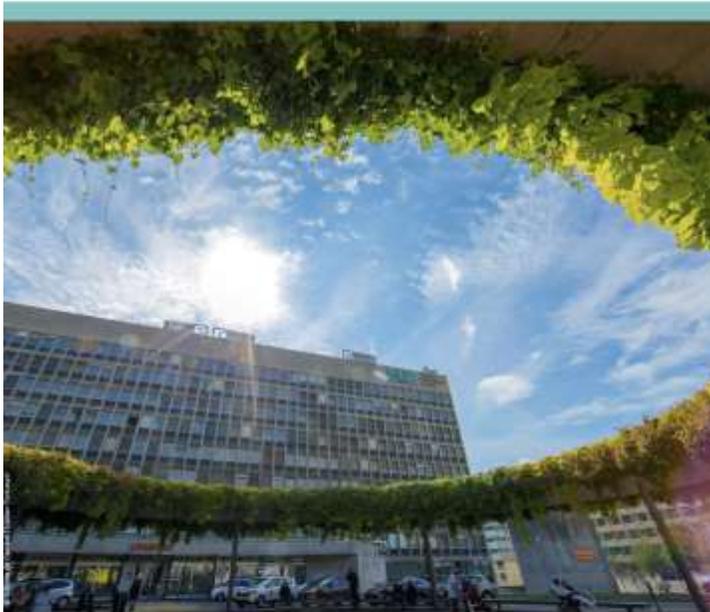
- ▶ Making it easy to do the right thing



Móðgætt A	
1 → Hættur	10 min
2 → Hættur	12 min
3 → Hættur	14 min
4 → Hættur	25 min
5 → Reykjavík - BSI	211 min
Móðgætt B	
6 → Eglshóli	7 min
7 → Hlíðskarðstíð	12 min
8 → Setjvellir	22 min
9 → Eglshóli	22 min
10 → REF - Alþingi	200 min
Langakútt C	
11 → Eðisgrandi	3 min
12 → Eðisgrandi	10 min
Langakútt D	
13 → Stettuvogur	8 min
14 → Stettuvogur	38 min

Switzerland

SUSTAINABILITY
STRATEGY 2030



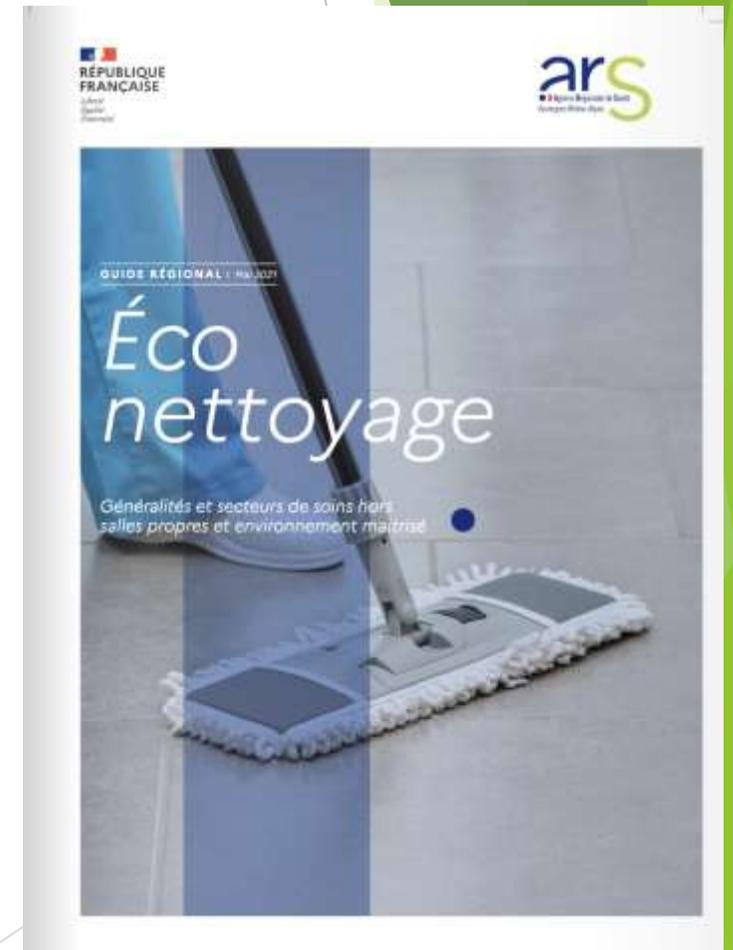
HUG Hôpitaux
Universitaires
Genève

LES HUG REÇOIVENT UN PRIX POUR L'ÉLABORATION DE
LEUR STRATÉGIE DE DURABILITÉ



Collaboration

No more disinfectants



HECAF 360

Used syringes and sanitary pads: Nepali engineer's mission to recycle all hospital waste

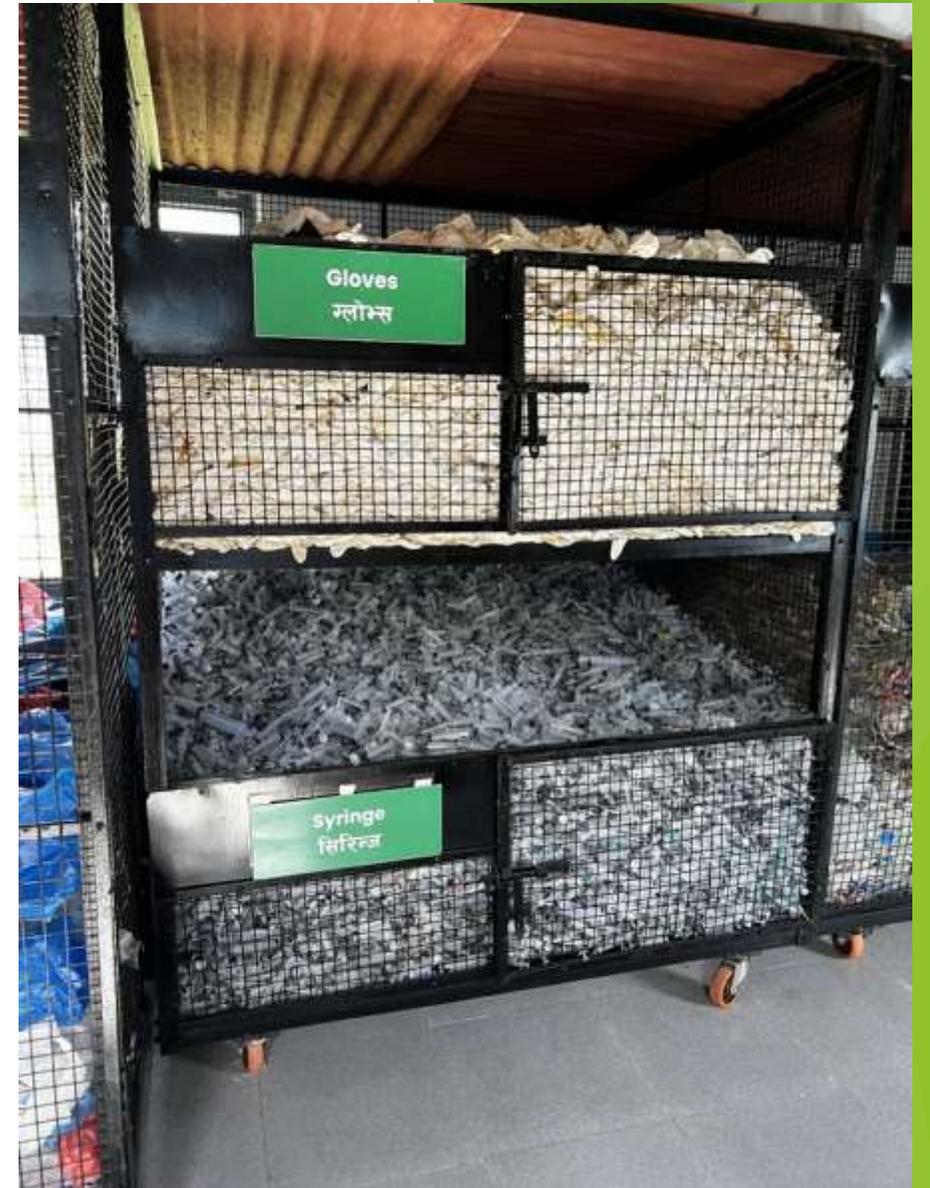
Even amputated limbs can be recycled. It's behaviour change that is the biggest obstacle to a circular economy for healthcare, says Nepali engineer Mahesh Nakarmi.



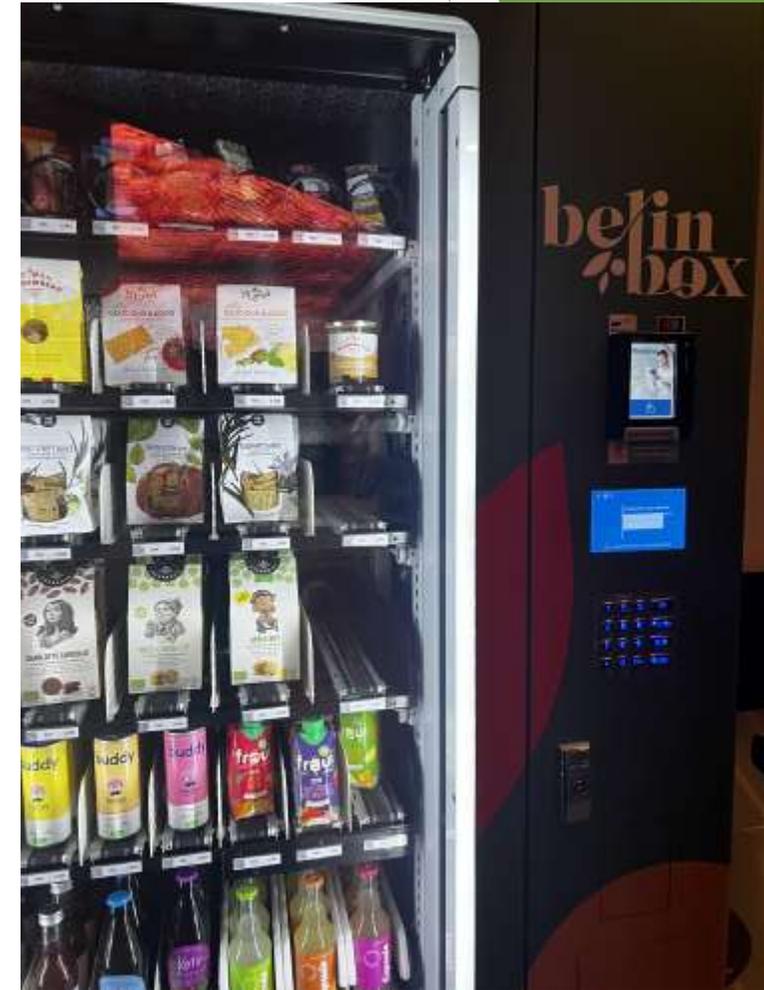
“It’s about changing the mindset of staff. That’s the key.”



Nepal



Feel-good projects



The Carbon Footprint of Surgical Operations A Systematic Review

Chantelle Rizan, MRCS (ENT),*†‡§¶ Ingeborg Steinbach, MA,§ Rosamond Nicholson, MBChB,¶
Rob Lillywhite, PhD,|| Malcolm Reed, FRCS,† and Mahmood F. Bhutta, FRCS*†**

Downloaded from

-Efficient

-No Single-
Use Plastic

Carbon footprint of cataract surgery in different settings:

Cataract surgery in **UK** = **182 kg CO₂**

Cataract surgery in **India** = **6 kg CO₂**

Why? -highly efficient systems
- reusable equipment

And the best part? **LOWER** rates of infective endophthalmitis

Get Involved. Collaborate.

- ▶ www.SustainableDoctor.co
- ▶ Green Team
- ▶ Your Union
- ▶ HNZSustainability@health.govt.nz
- ▶ The other caps you wear or contacts you have



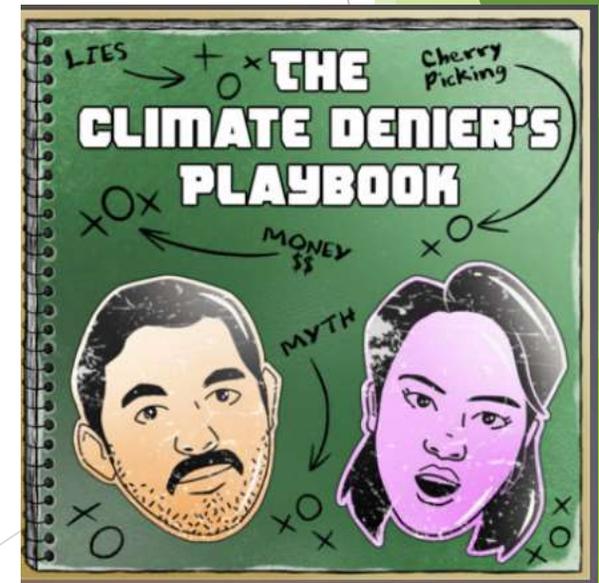
A few nuggets of positivity

- ▶ Every little bit counts
- ▶ Don't let perfect be the enemy of good
- ▶ You are not alone
- ▶ Don't Panic
- ▶ There is Hope



Further Inspo

- ▶ Ethically Kate
- ▶ The Rubbish Trip
- ▶ Climate Town
- ▶ Climate Denier's Playbook
- ▶ The Juice Media



Get in touch

- ▶ www.SustainableDoctor.co
- ▶ rebecca@vital.kiwi.nz
- ▶ karenrpcv@hotmail.com

Summary and CALL TO ACTION



What will YOU do with this?



A few more ideas

- ▶ Petition Pharmac to carry dry powder salbutamol inhalers
- ▶ Disposal instructions on prescriptions
- ▶ Get bike racks installed
- ▶ Ask for plant-based options at your hospital café
- ▶ Enter submissions for improving public transportation options



Energy Usage

- Most businesses think of energy as an overhead rather than a variable cost they can control (EECA)
- Most can make a minimum of a 20% cost saving with energy efficient changes to the workplace
- www.energywise.govt.nz (CHECK)

Computers

- Switching off can save \$120 a year
20 computers = \$2400
- **2/3 of a computer's energy used by the monitor**
- Screen savers don't save energy

Reusing of unwanted equipment

Sell it on:

- www.trademe.co.nz or
- www.te.co.nz trade and exchange

Gift it on a free website

- www.nothrow.co.nz
- www.donatenz.co.nz
- www.freecycle.org
- www.reusable.co.nz

Procurement and contracts

- ½ NHS Procurement emissions due to **pharmaceuticals + medical equipment** extraction, processing, assembly, packaging, transport, storage, handling
- **Use less** - waste less, innovate, reuse, recycle, lean procurement
- **Choose well** - choose **manufacturers with green supply chain** - start asking. Prefer local manufacturers.
- provide **preferred criteria for awarding contracts**.
- **Get our national purchasing bodies to require these.**

Interesting but probaby don't need.....

- New Zealand has the 8th highest level of electricity generation per person in the OECD
- Chose power company with renewable generation sources
- Electricity generation from non-renewable sources is steadily increasing
- To reverse this trend, New Zealand needs to **reduce total demand** and this should be readily achievable by using our energy more efficiently

Healthy Living for Patients/families

- Encourage activity - cycling/walking
- Subsidised insulation - EECA '*Warm-up New Zealand: Heatsmart*' programme.
- Discourage unflued LPG heaters
- Curtain banks
- Eat less meat

Supply Chain

- Every-day purchasing decisions matter
- Prefer suppliers using environmentally friendly processes and/or local or New Zealand manufacturers
- Ask our organisations to include environmental sustainability in core values and key operating guidelines
eg DHB, Pharmac, PHOs, IPAs.

Make it happen

- Motivator(s) required
 - Positive reinforcement
 - Everyone is a potential resource-saver rather than a potential resource-waster
 - Go-to person for problems
- Aesthetics
- Involve key staff

Keep it happening

- (a) Left to their own devices, people will only maintain momentum if.....
- (b) a) they have to give a presentation on progress to their peers/ Board
- (b) b) they know someone (external) is booked to come in on Tuesday afternoon to check progress, or
- (c) it is a legal requirement.

- Or It is someone's (paid) job to encourage and sustain the change

High Yield Sources of Information/Inspiration

- ▶ **Health Care Without Harm** (<https://noharm-global.org>)
- ▶ **OraTaiao** OraTaiao.org.nz
- ▶ **Climate and Health Alliance** <https://www.caha.org.au>
- ▶ **CleanMed Europe** virtual conference - 3-7 June 2024 (<https://cleanmedeurope.org>)
- ▶ **CPD Match** (<https://cpdmatch.co.uk>)
- ▶ **NZ's Te Whatu Ora Sustainability Report:** <https://www.tewhatauora.govt.nz/publications/sustainability-report-q1-fy23-24/>
- ▶ **Geneva Sustainability Centre:** <https://ihf-fih.org/what-we-do/geneva-sustainability-centre/>

Co-benefits of reducing wastage

1. **Alternative spend** for the health dollar
2. Improved health - **better-managed health** conditions
3. Reduced secondary care costs
4. Reduced chance of overdose
5. **Safer environment** - **incorrectly dumped medication** can reach waterways and eventually **human food chain**

SEDUM (Mid Central DHB)

- 6 of the top 13 most frequently returned medicines were preventative cardiovascular medications.
- And inhalers (esp preventative).
- Also medications known for side-effects eg. statins, salazopyrin
- Top 3 reasons: ‘surplus’, bereavement, medication changed
- “Frail Elderly”

Why does it matter?

- Contaminated medical waste undergoes more **energy-intensive disposal**.
- NZ contaminated waste is **steam-sterilised** in combined loads with sharps and pharmaceutical waste, then taken to dedicated 'sanitary' (fully lined) landfills.
- Autoclaved at high heat, under high pressure for an hour - (400 kPa) using water/ steam heated to 145°C within a rotating steriliser
- In the past, medical waste used to be incinerated (with dioxin byproducts from the PVC plastics) but now is autoclaved under pressure. This is achieved by tumbling the waste around under pressure (400 kPa) using water/ steam heated to 145°C within a rotating steriliser

And we are the People...with Responsibility

- ▶ Healthcare sector 5.2% global emissions (the Lancet)
 - ▶ > 2 billion tons of CO₂/year
 - ▶ More than shipping and aviation
- ▶ Professional duty to do better
- ▶ Our patients

...And a Huge Potential

Economic Clout of the healthcare sector:

10% NZ GDP

10.9% GWP

18.8% US GDP

Source: Data World Bank

Social Clout

EQS GROUP

The World's Most & Least Trusted Professions

Share of respondents considering the following professions untrustworthy in 2021



n = 20,000 respondents in 28 countries

■ most trusted ■ least trusted

Source: Ipsos

Doctors	58%	58%	64%	57%	55%
Scientists	57%	57%	61%	59%	59%
Teachers	52%	51%	55%	53%	52%
Armed Forces	42%	42%	44%	44%	43%
Ordinary men/women	37%	37%	38%	38%	37%
The Police	37%	37%	40%	38%	39%
Judges	34%	35%	37%	33%	32%
Lawyers	30%	29%	30%	28%	25%
Television news readers	29%	28%	27%	25%	24%
Politicians	27%	27%	25%	23%	23%
Civil Servants	27%	26%	25%	23%	24%
Clergy/Priests	25%	26%	26%	24%	21%
Bankers	25%	24%	23%	21%	20%
Journalists	24%	25%	23%	22%	21%
Business Leaders	24%	23%	23%	22%	22%
Advertising executives	18%	17%	15%	13%	13%
Government ministers	17%	16%	15%	13%	12%
Politicians generally	13%	12%	10%	10%	9%

The most trustworthy professions as an average across all 31 countries surveyed. The numbers on the right are past years' surveys in 2022, 2021, 2019, and 2018. Photo credit: Ipsos.

Involved in Zero Carbon

- ▶ Mindset and Habit Change
- ▶ Infrastructure Change





If You're Worried About the Climate, Move Your Money

How you consume matters to the planet. How you invest does too.