

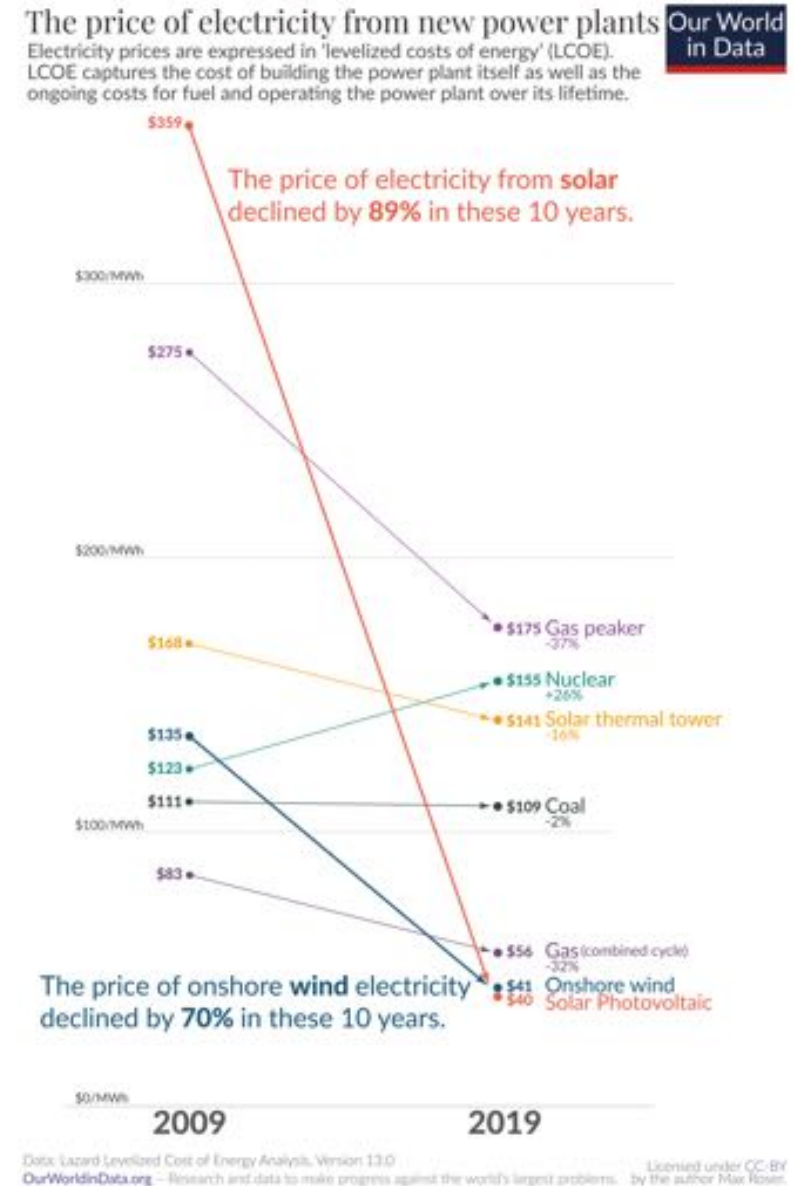


# Bank.Green for Engineers

Q1 2023

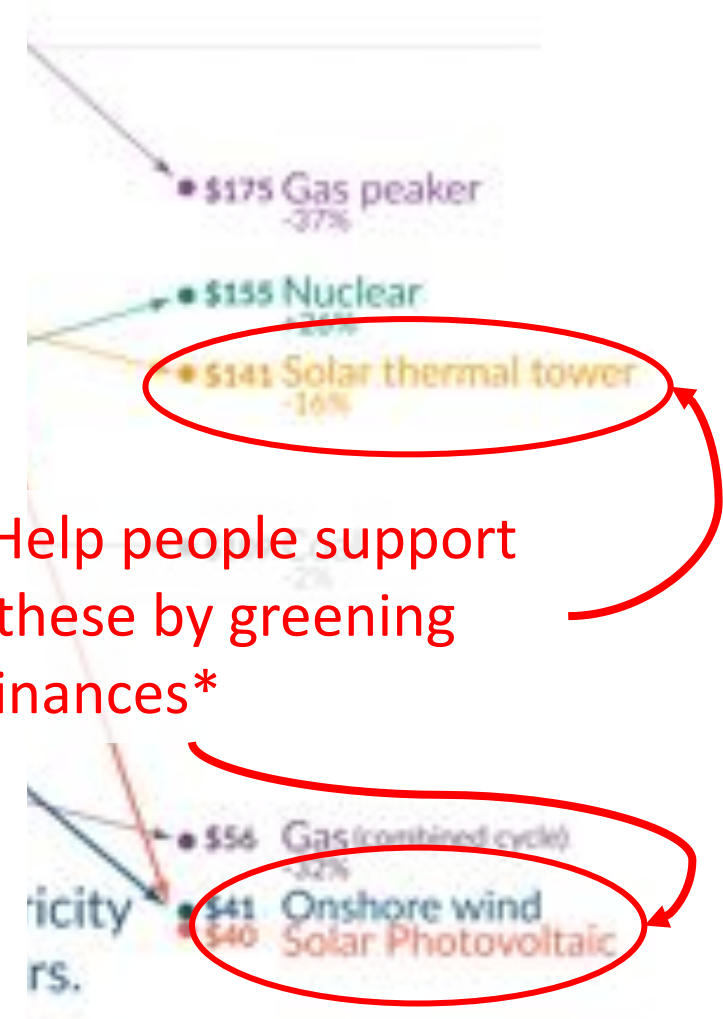
# Bank.Green Vision

- To accelerate the advent of a sustainable future by...
  - evaluating and promoting green banks and their products,
  - protecting consumers [from greenwashing], while
  - mobilising them to fight climate change by greening their finances



# Bank.Green Vision

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  - protecting consumers [from greenwashing], while
  - mobilising them to fight climate change
    - By greening their finances



Tl;dr: Help people support these these by greening their finances\*

\* This chart is only for electricity, but also applies to other industries. What really matters for energy and other industries is the relative cost of polluting industries vs their sustainable counterparts.



“to accelerating the advent of a sustainable future...”

# Starting with bank loans to the energy sector

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- Banks provide the majority of energy financing
  - True both for fossil fuels and sustainable energy
- We want
  - More bank loans to sustainable energy
  - Fewer bank loans to fossil fuels

# How to achieve? (theory of change)

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- **The obvious thing (doesn't work): Consumer pressure from bank switching**
  - Moving accounts is slow and difficult
  - Relatively few people will do it
  - Banks' marketing departments sometimes care. Their finance departments do not.
- **The non-obvious solution: Demonstrating business feasibility**
  - Big banks lend to fossil fuels because they feel that they need to for profitability
  - Bank.Green needs to demonstrate that it's more profitable to lend sustainably
- **How to demonstrate business feasibility**
  - Verify when "green" finance is truly green
    - Fossil free certification for banks
    - Exclude and ostracize greenwashing
  - Facilitate green lending
  - Show that green finance wins customers
  - Publish and publicize results





## Typical tech volunteering at non-technical nonprofits

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Requests by day:

1. "Fix the printer"
2. "Fix Excel macros"
3. "Make an app encouraging 5000 people to spontaneously organise"
4. Hack the CIA

No In-between

Many non-technical collaborators imagine that you think, look, smell, and will act like this 🙄 ->



# Bank.Green Tech Volunteering



Use your hard  
skills

Learn new  
skills &  
technologies

See your  
impact

Most effective  
use of your  
effort





# Tech Setup

Bi-Weekly  
Plannings

Groomed  
Backlog

Backend:  
Python Django  
+ SQLite

Frontend:  
Vue.js + Nuxt

GraphQL API

Open-Source  
Repos, Open  
Data





# Upcoming Initiatives



TESTIMONIALS



BETTER BANK RATINGS



BANK CUSTOMIZABILITY

# Testimonials



- Users tell us about their bank switching experience
  - From what bank to what bank?
  - Why switch?
  - Pain points of switching
  - How is the new bank?
- Bank.Green shares data with banks on...
  - Customers leaving/joining for environmental reasons
  - Products their customers wish they had (Fossil Free Alliance banks only)
  - About their user experience (Fossil Free Alliance banks only)
- Tech Work:
  - Mostly frontend (vue.js) with typeform integrations



# Testimonials (Tech Details)



- Data collection via typeform (embed if possible)
- Various ways to enter typeform
  - Bottom of "great" rated bank pages
  - Contact us section
  - Etc
- Mostly vue.js work



# Better Bank Ratings



- Updated system for rating banks
  - What organizations control lending with customer deposits?
  - Who do they lend to?
  - How environmental is their lending criteria?
- Bank.Green displays some of data on its website
- Tech Work:
  - Finance & Admin: Devising systems to collect
  - Backend: Assigning ratings



# Bank Ratings (Tech Details)



- Much work depends on how the ratings are designed (in progress)
- Some data will need to be collected from the outside world. In the backend, this likely means:
  - Additional record attributes
  - Improved tools for merging and associating records
  - Repetitive jobs will likely be required to collect and associate data
- Displaying this data on the frontend (Vue.js)
  - This will bleed somewhat into the next initiative. Some data should still be displayed in this initiative though



# Bank Customizability



- Allow editors to add custom information on more discoverable bank subpages
  - Highlight positive or negative actions
  - Highlight unique services that green banks offer
  - Highlight accreditations (i.e. B-Impact)
  - Easier editing via headless CMS
  - Tweaks for bots
- Tech Work:
  - Frontend: Tighter integration (vue.js) with prismic CMS
  - Frontend: Higher lighthouse scores for bank pages (vue.js + nuxt.js)
  - Backend: Communication between Django and headless CMS (prismic.io)



# Bank Customizability (Tech Details)



- Two pieces of work:
  - connecting the python-django backend with prismic.io headless CMS
  - A design framework for what may need to be added to bank pages
- Some loadtime and lighthouse score improvements are included here, but can be moved to other initiatives if necessary

# Bank.Green Engineering Team

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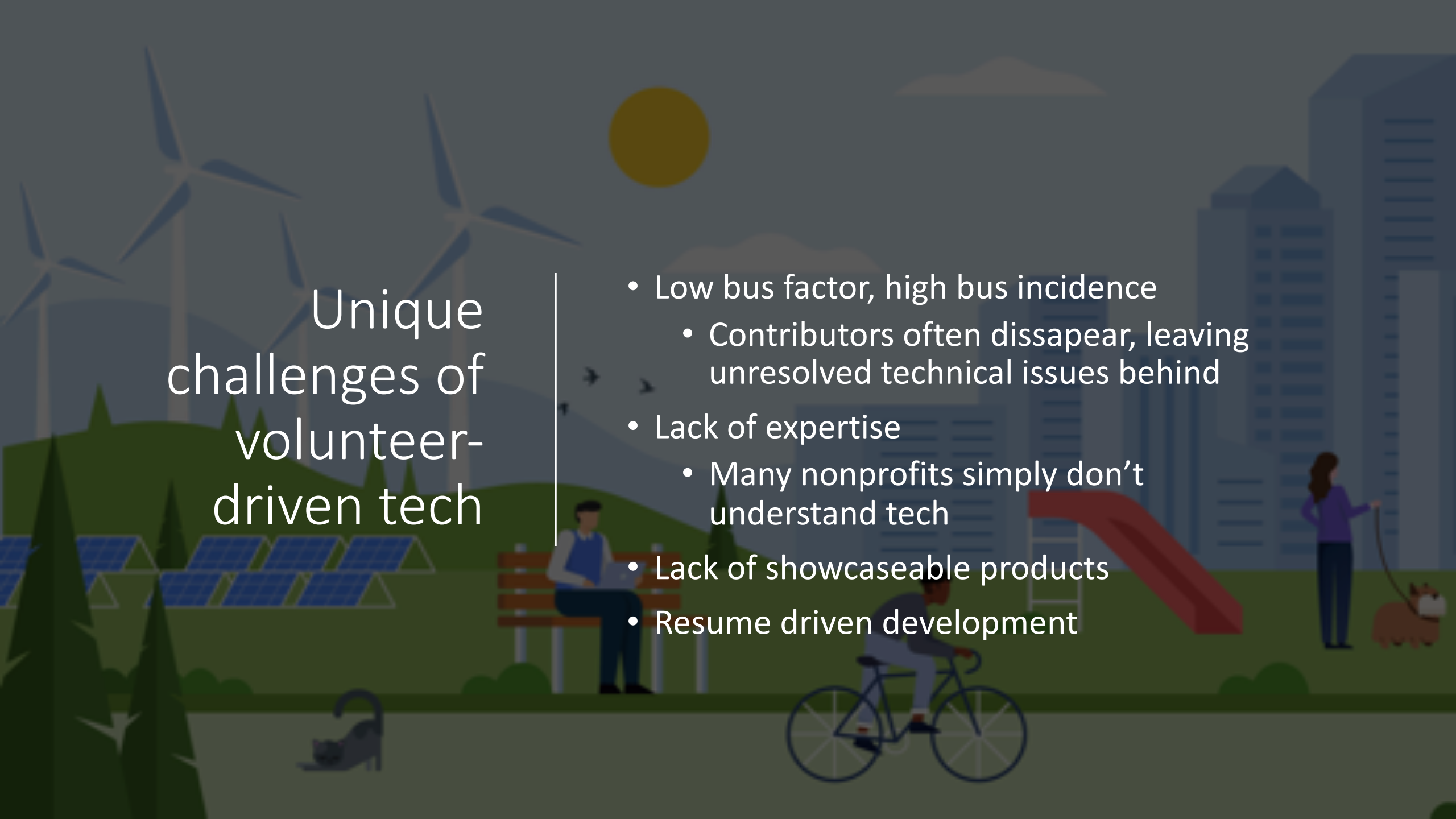
Challenges



Guidelines



Vision



## Unique challenges of volunteer-driven tech

- Low bus factor, high bus incidence
  - Contributors often disappear, leaving unresolved technical issues behind
- Lack of expertise
  - Many nonprofits simply don't understand tech
- Lack of showcaseable products
- Resume driven development

# Bank.Green Guidelines for Engineering Culture

## Delivery includes collaboration and explanation

- Explaining your work to at least one colleague
- Technically present large changes to colleagues

## Embrace ignorance

- Ask questions frequently in Slack
- Mark them resolved as necessary
- Err on the side of over-asking

## Teach

- Share what you learned, even if it's redundant
- Repeat yourself
- Err on the side of repetition and redundancy

## Communicate frequently

- Request and offer help/calls when possible
- Say when you will respond
- Prioritize synchronous communication when possible

## Be proud of your work

- Feel free to add yourself to the Bank.Green team page,
  - link to your profile/website, and
  - link your profile/website to Bank.Green

## Choose well-known technologies

- Boring and bulletproof > cutting-edge future abandonware
- Use Bank.Green as an opportunity to learn proven but new-to-you tech

## Promise less. Deliver more

- undelivered promises have negative value
- Keep your promises manageable and deliver more if possible.



# Engineering Team Vision

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- Staffing
  - 2-3 high-availability devs
  - 2-3 more limited availability devs
  - 1 product owner to help with productization and prioritization
  - 1 UX designer (high availability, low hours)
- Technology
  - Continue with Vue.js-Nuxt, Python-Django, SQLite, and Prismic.io CMS
  - Potential for additional data ingestion and processing for financial ratings
- Rituals
  - Review + Sprint planning 2x per month (recommended attendance)
  - Retro 1x per month (recommended attendance)
  - Bi-Weekly groomings (open attendance)
  - Strategy meeting 1x per month (open attendance)

## Collaboration

- Active and friendly Slack
- Easy to ask questions of high-availability devs
- Video and voice call

