



# Stakeholder Engagement: The Safecast experience

Joint ICTP-IAEA Workshop on Environmental Mapping:  
Mobilising Trust in Measurements and Engaging Scientific Citizenry  
ICTP, Trieste - Italy March 6-24, 2017

# Who are the stakeholders?

**Affected People**

**Project Members**

**Government**

**NGOs**

**Press**

**Expert Community**

Skepticism?

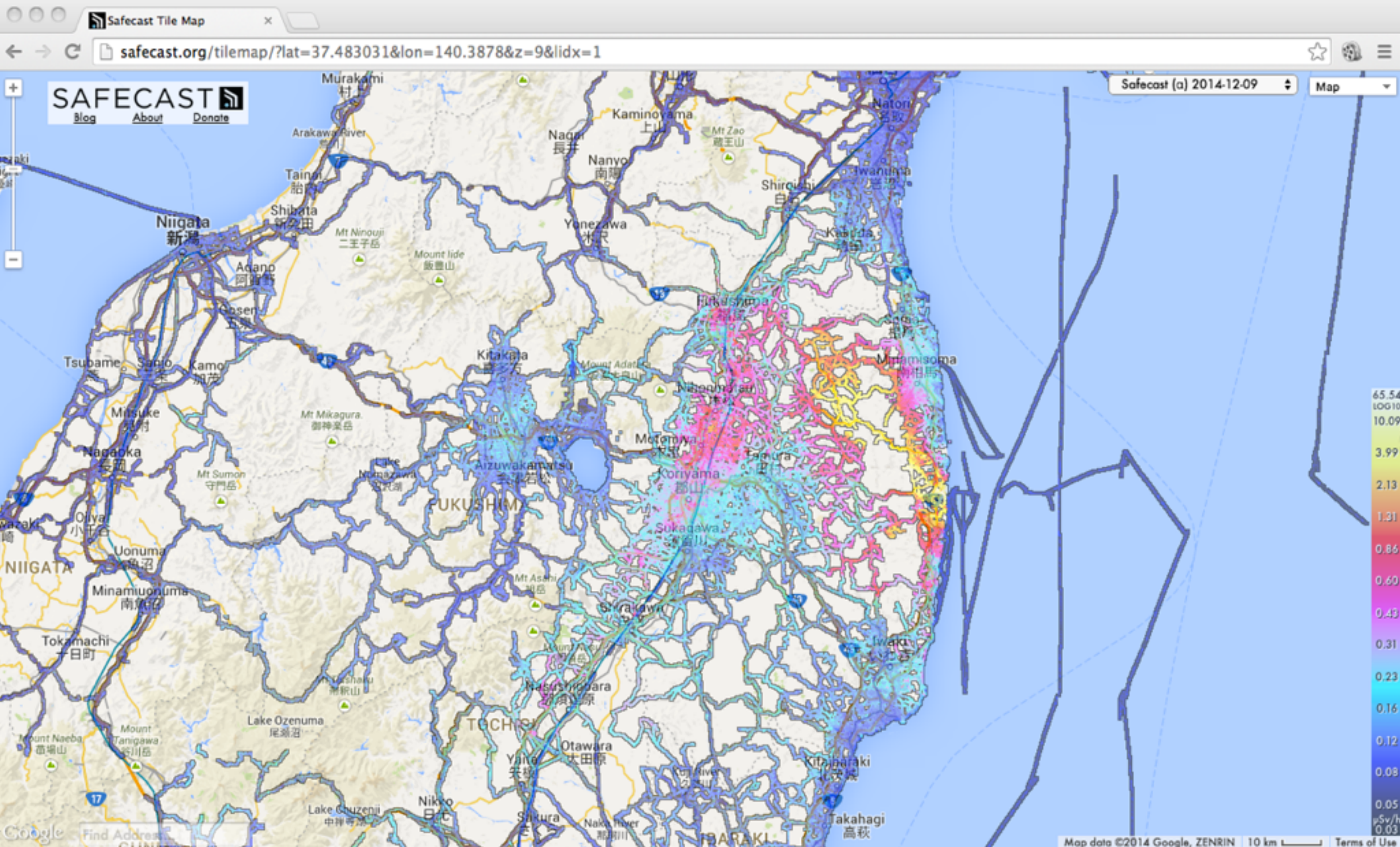
Pro vs Anti ?



Most people are looking  
for a simple answer.....

...but it's complicated!

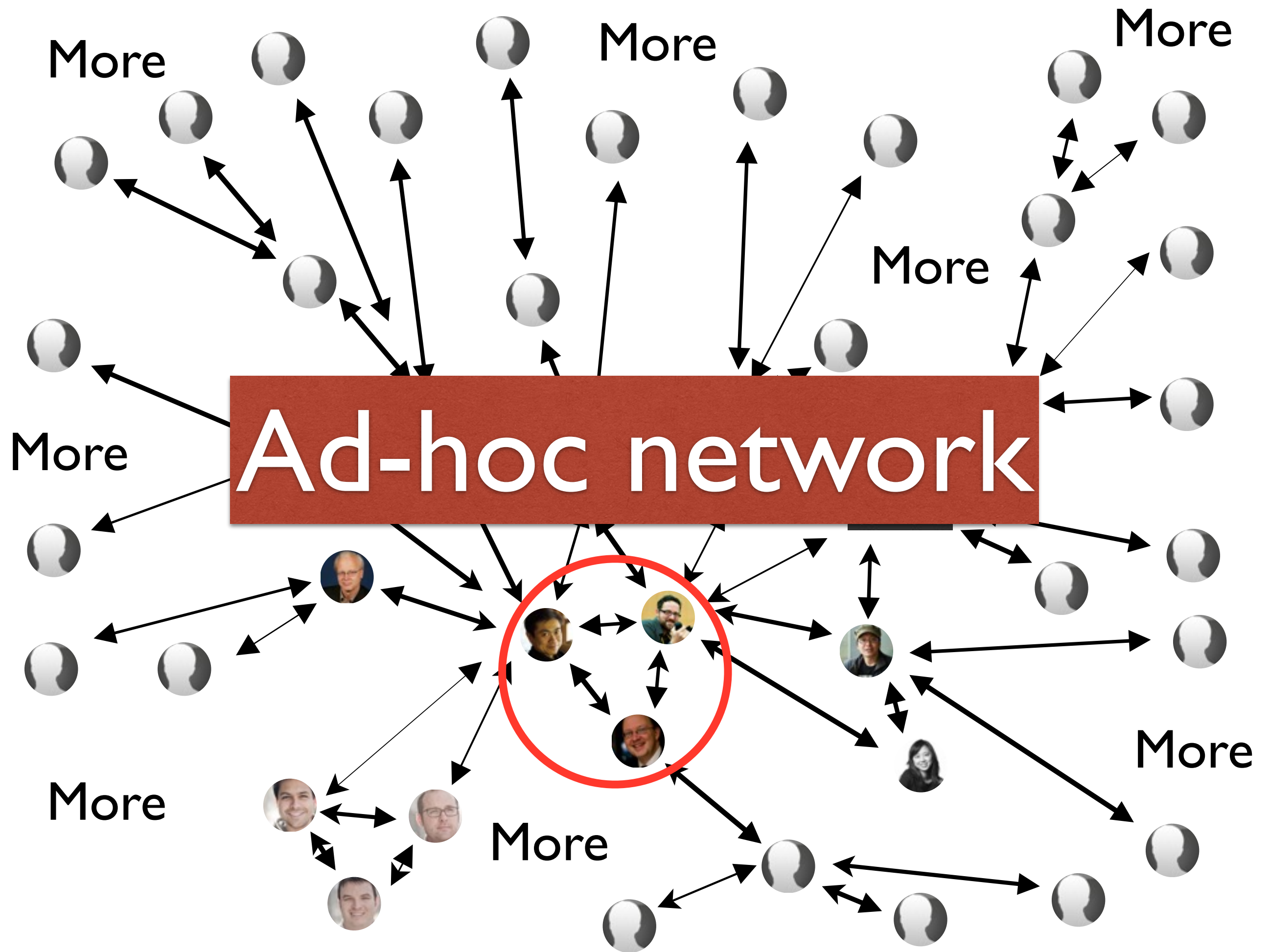
# Primary output: crowdsourced online maps



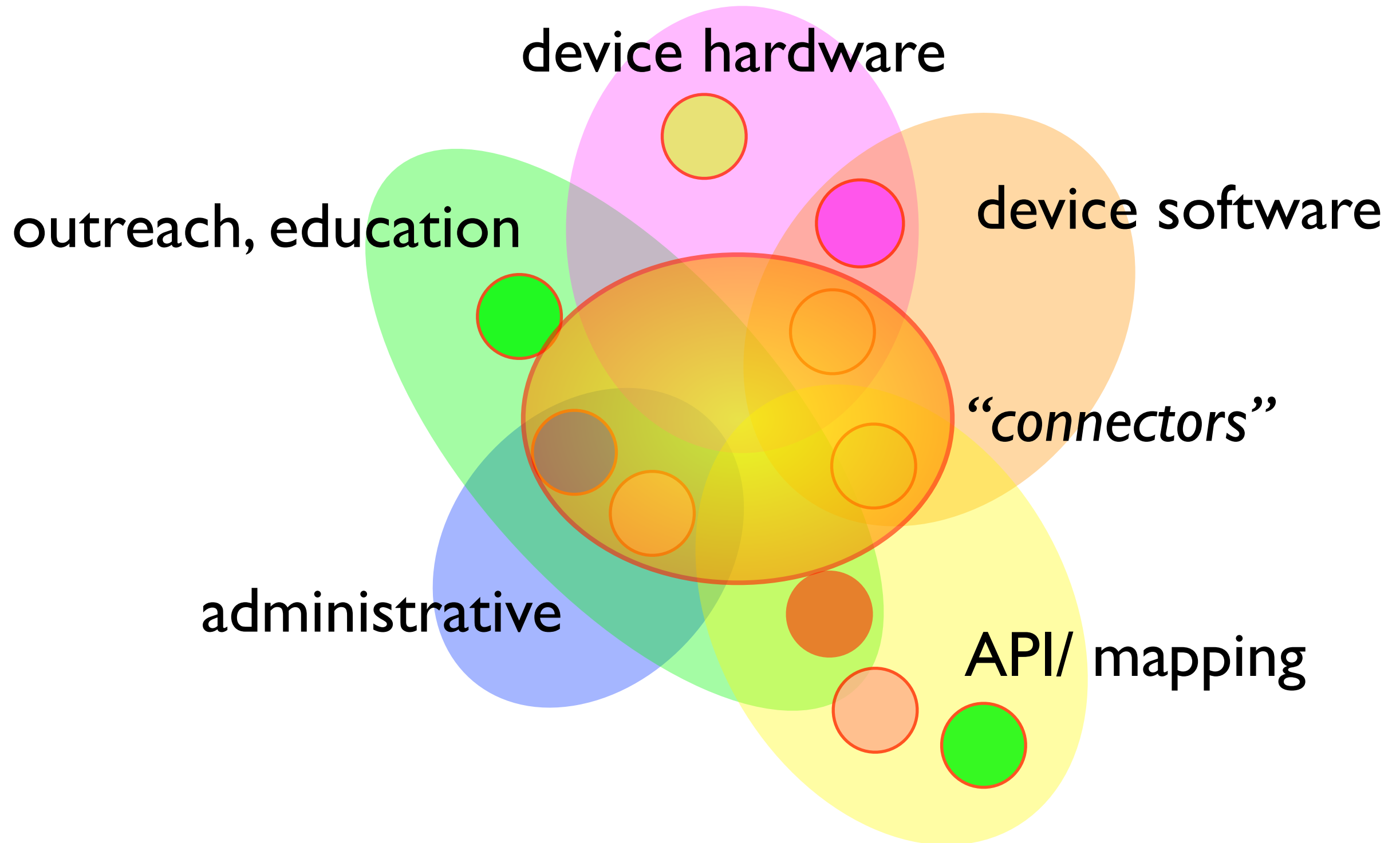
[safecast.org/tilemap/](http://safecast.org/tilemap/)

Community





# Our Teams



*Lots of multitasking, multi-competence*

Different Audiences

Different Approaches

The key is contact!



One purpose:  
Involvement in the project

Another purpose:  
Promoting the project  
(which will hopefully lead  
to more involvement)

**HYPE!!**

VS

calm and sober

# Engagement

- 1) Make it possible for people who want to participate to find us and get in touch.

# Engagement

- 2) Reach out to people who can answer questions on behalf of the community.

# Channels

- Blog
- Facebook
- Twitter
- Google Group
- Summaries and Reports
- Workshops
- Education Projects
- Media appearances

Trust is everything.

(examples)



# Increase involvement:

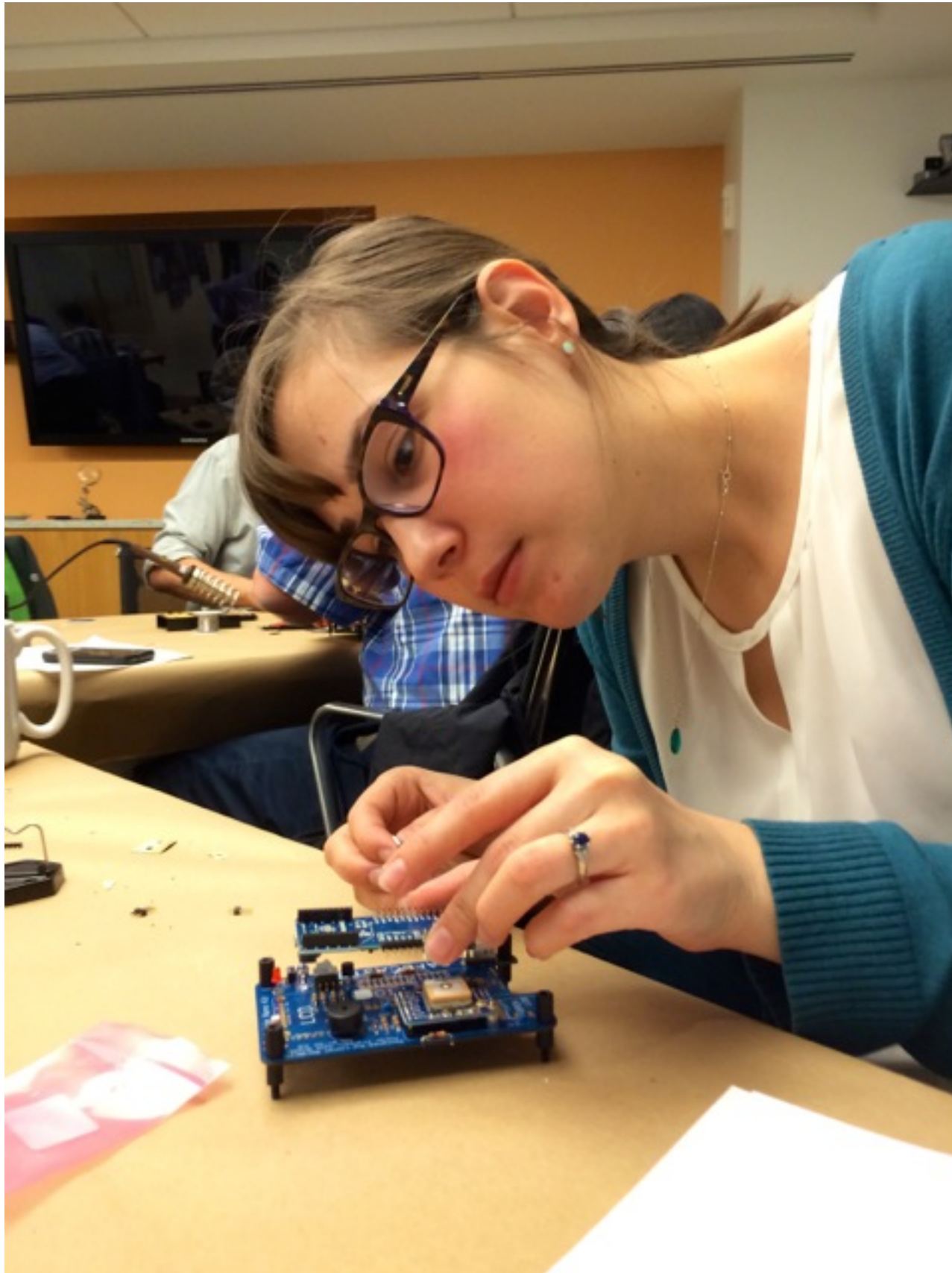
- Hold Workshops
- Publicize them
- Word of mouth
- Get-togethers







Workshops



## **Workshops in:**

Tokyo

Fukushima

Kobe

Washington, DC

Strasbourg

Taipei

Hong Kong

Seoul

**Trieste**









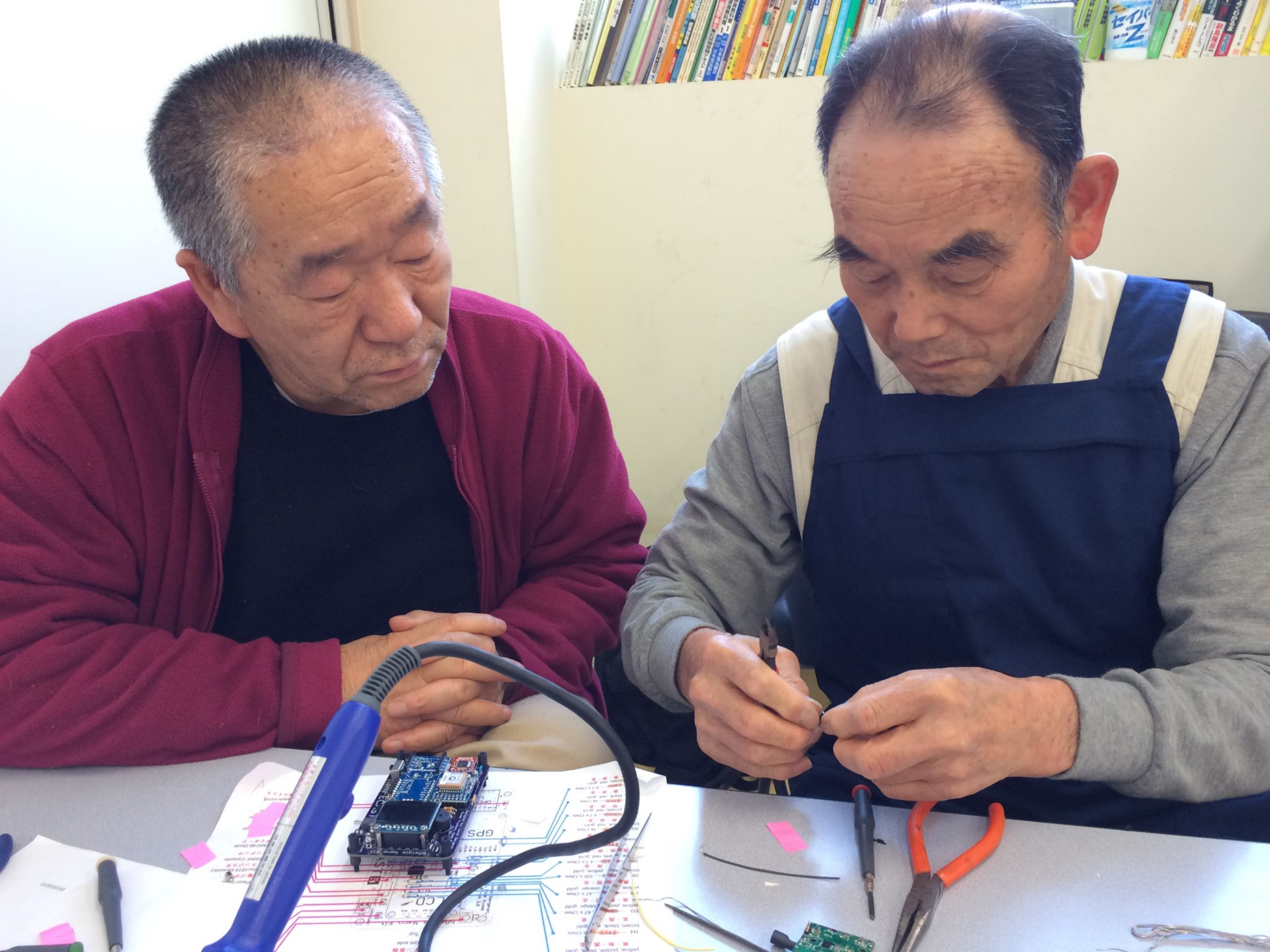
Testing 12 newly-built bGeigie Nanos in a nearby park.





Workshop in Seoul, Korea Dec 2016







Educational projects

# Active projects in:

- Japan
- France
- Czech Republic
- USA



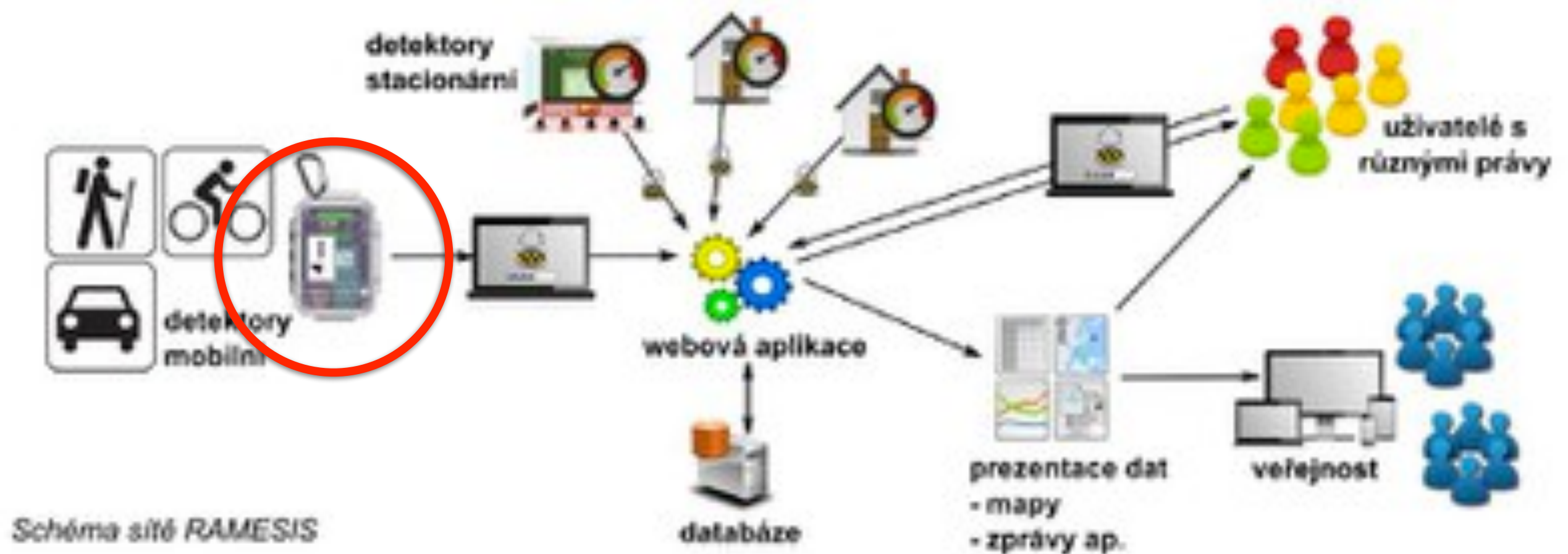


Safecast education in Vichy, France  
(iffo-RME)



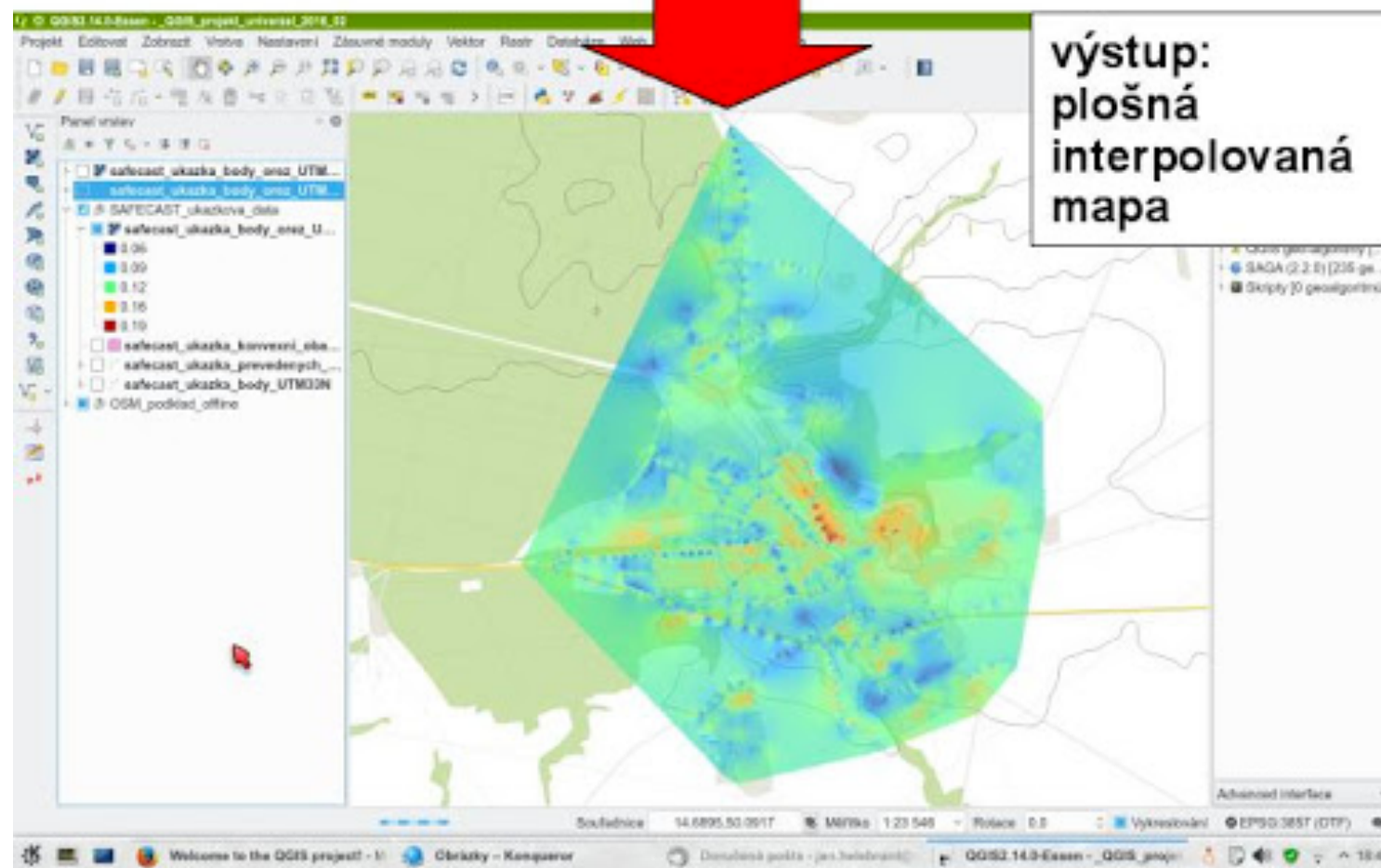
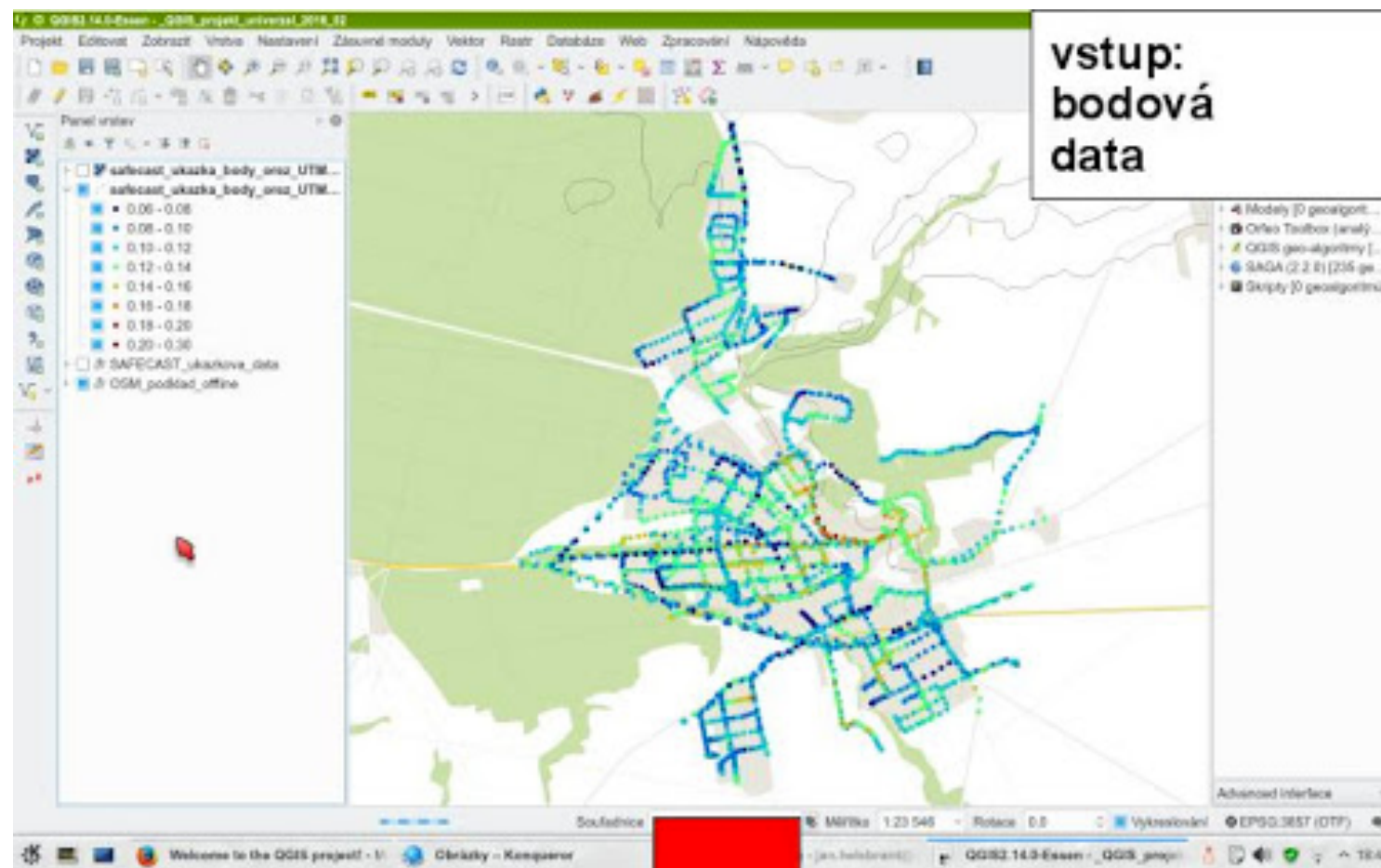


Safecast education in Vichy, France  
(High-school student work)



Safecast education in Czech Republic  
(SURO)





Safecast  
education in  
Czech Republic





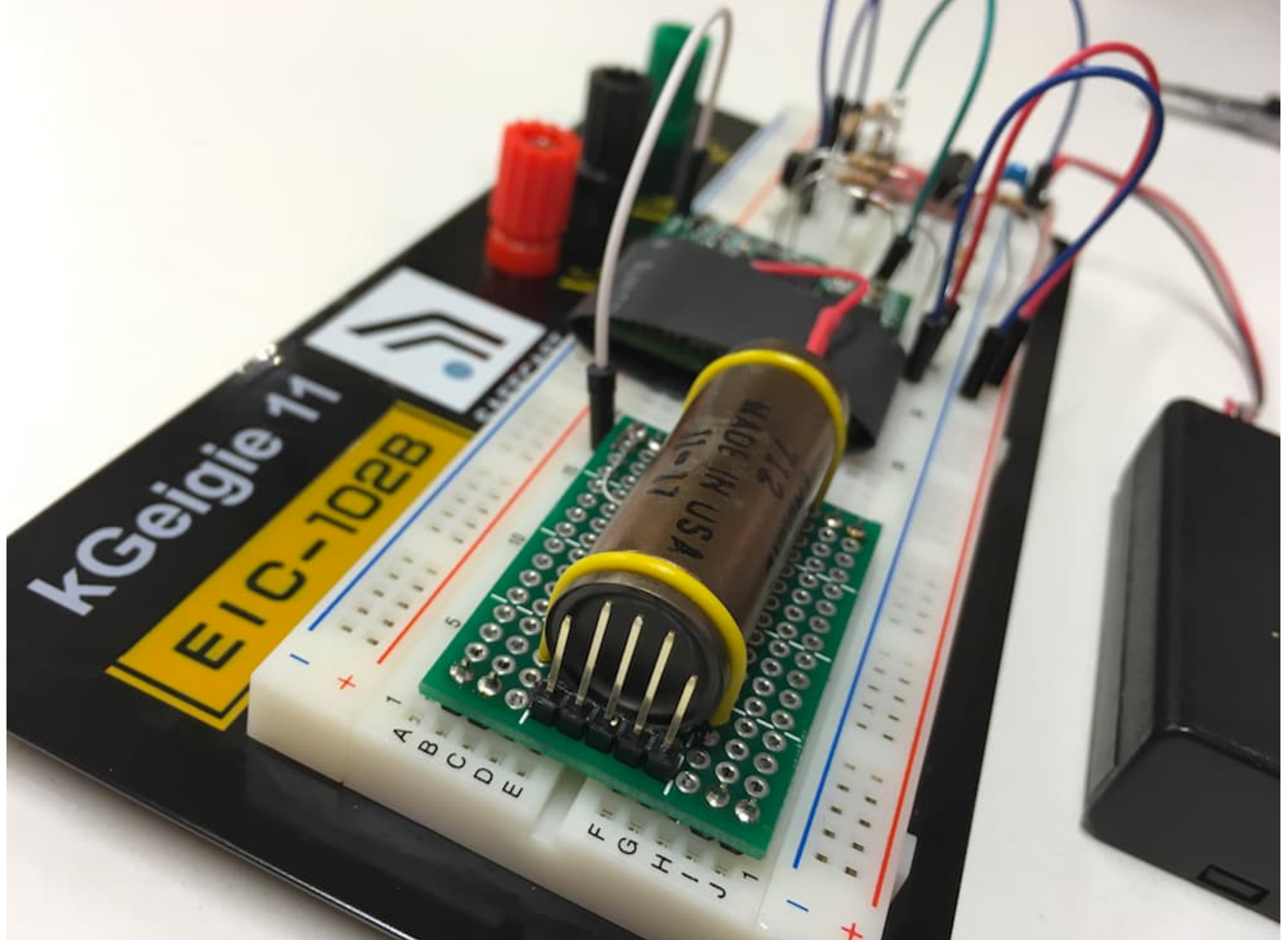
KitHub: Sells kits and provides K-12 curricula  
<https://kithub.cc>





Mori Kids Workshop





Safecast kGeigie

# Outreach to Government

Easier with Local Gov't

Partnership with Public Sector:

Safecast Street-by-Street





Safecast volunteers and Koriyama City officials





Ten bGeigies were delivered to Koriyama City





Partnering with public sector: bGeigies have been mounted on postal delivery vehicles in Fukushima, which cover every street in town over the course of normal daily activity.



# Safecast Street-by-Street

Shown: Koriyama detail -  
100m grid

Info: Mem warning (66.7 MB)

1.00  
LIN  
0.75  
0.50  
0.25  
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0.00



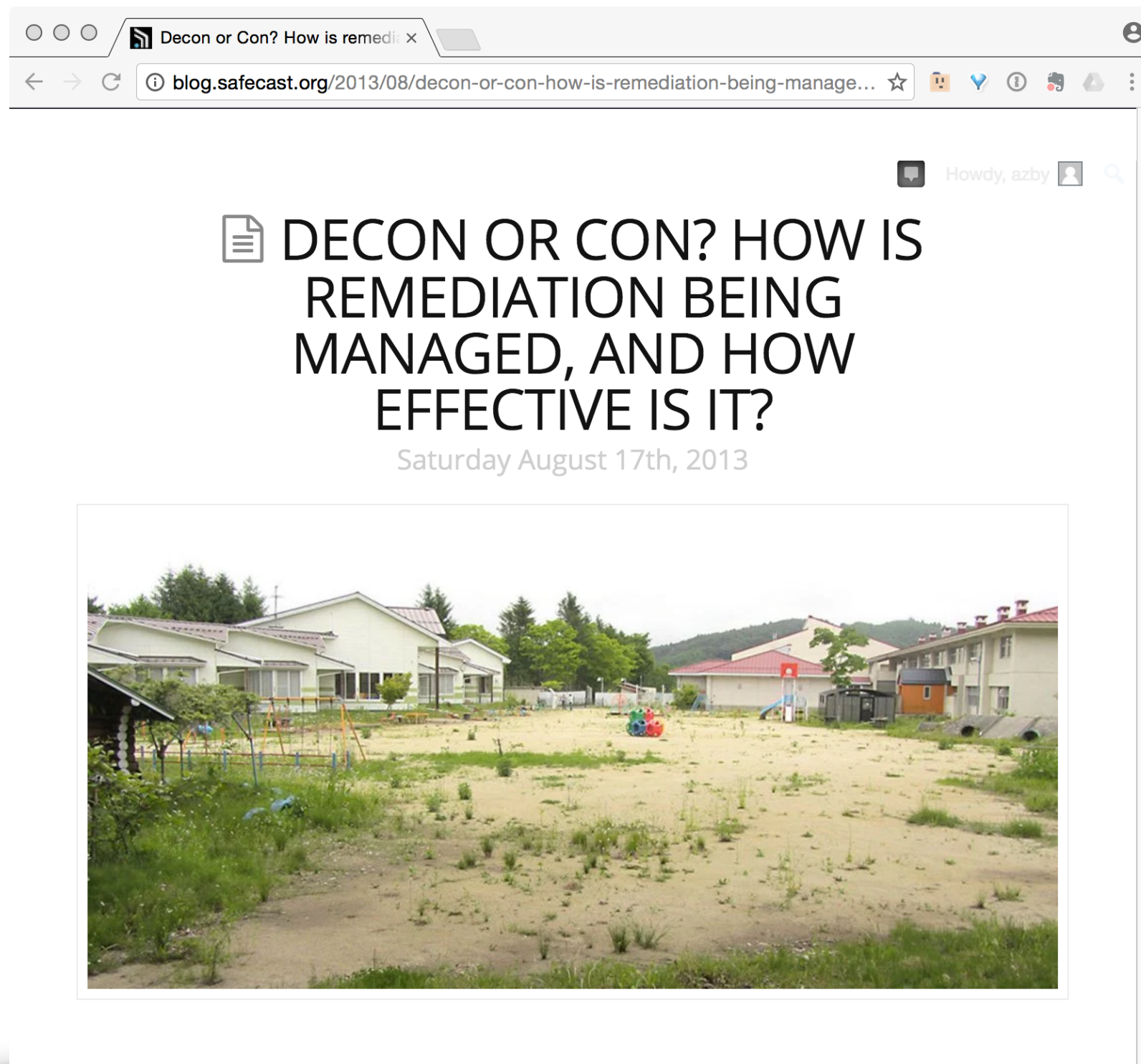
Increasing quiet  
approaches from gov't for  
feedback and advice

# Filling Information Gaps

Places for discussion and  
sharing information  
(Google Groups, etc)

Try to provide accurate and unbiased summaries of issues and findings, and help people find information they need to inform themselves.

# Example: Regarding decontamination policy and effectiveness

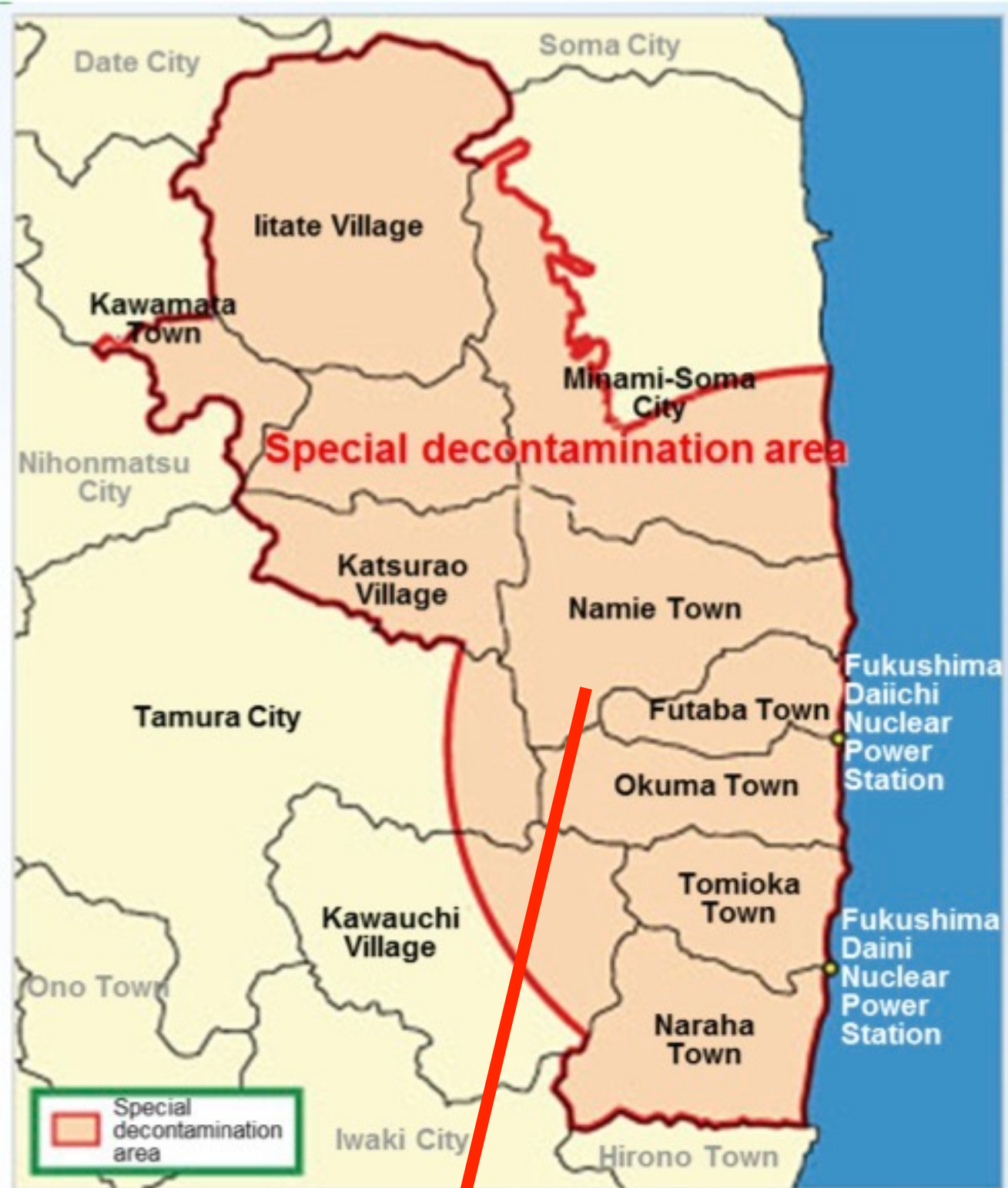


Investigative Blog Post, August 17, 2013





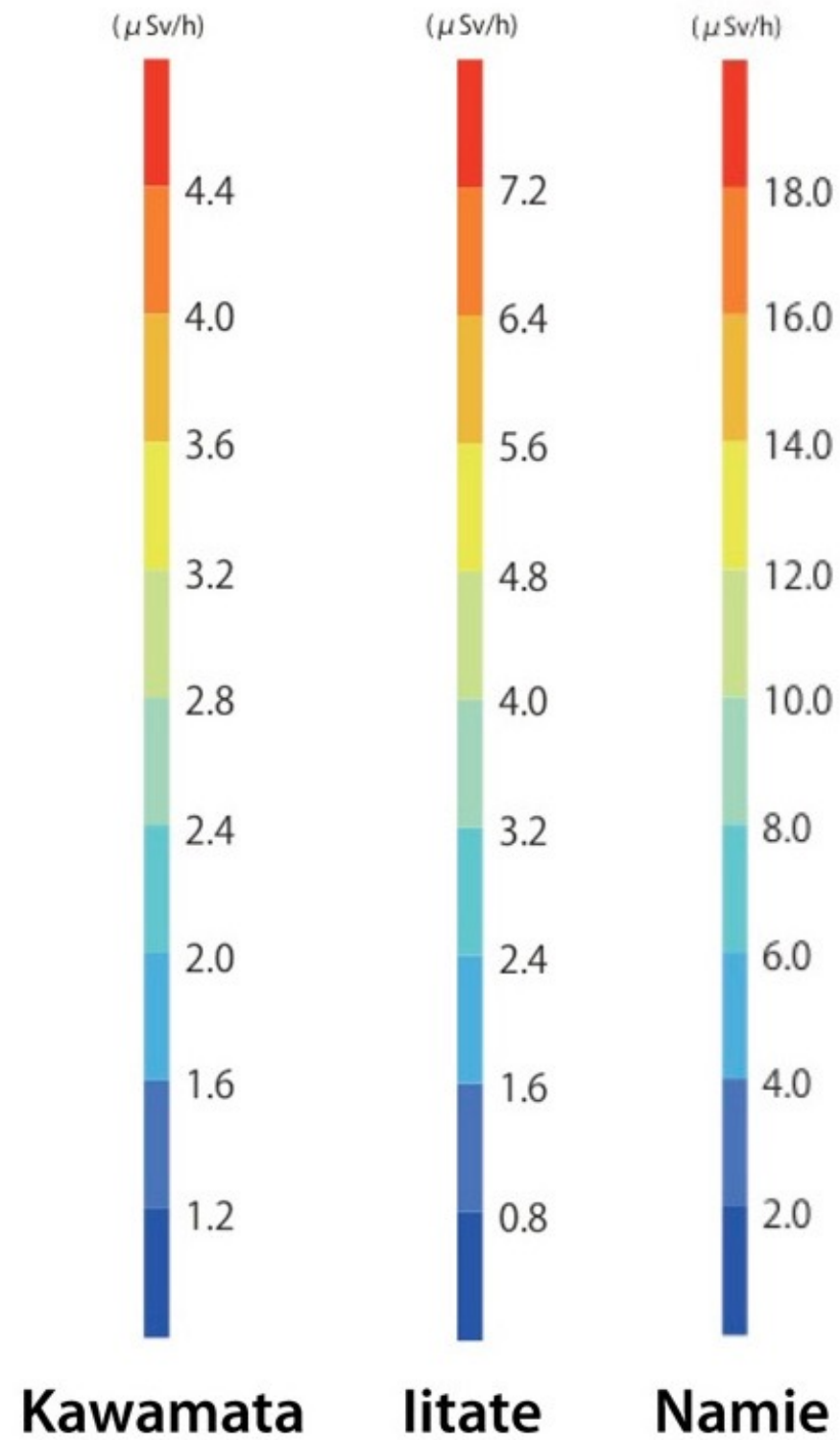
Managed by Local Gov't



Managed by Central Gov't

# Findings:

- Challenging to find out actual policies, even for researchers and journalists
- Effectiveness test results difficult for laypeople to interpret.
- Calling Environment Ministry directly was most helpful.
- Even our “brief” summary of policy and results was long
- The information was most helpful for journalists.
- Very important to learn that decontamination of “Special Decontamination Zone” (evacuated) and “Intensive Contamination Survey Zone” (non-evacuated) under different jurisdictions, i.e. national vs local.



**In the government guidebook,  
color coding of dose rate levels  
is confusingly inconsistent.**



# In response to negative press reports (Asahi-Shimbun Jan. 4, 2013)

## Countermeasures to prevent inappropriate decontamination works

### Actions

#### Thorough responsibility of contractors

- Establishment of system for responsible execution of works
- Imposing strict measures (suspension of bidding qualification by the entire government)
- reinforcement of no-notice inspection etc.



#### Establishment of broader management framework

- Collaboration w/ municipalities on check & info. exchange
- Information provision to the local residents about decontamination implementation (time & place)
- Effective monitoring by a third-party etc.



#### Reinforcement of MOE's administration system

- Drastic reinforcement of supervisory system (Increase field supervisors)
- Establishment of special hotline for inappropriate decontamination reports
- System for uniform management of such reports etc.



### problems

#### Inadequate system of operation & management

- Necessity of improving implementation system & awareness raising of contractors
- Necessity of deterrence against inappropriate works
- Gap between order intention & field management

#### Lack of viewpoints of locals and third-parties

- Anxiety of local residents on decontamination effects
- Necessity of the improvement of monitoring system: more specialty/ objectivity/ transparency

#### Insufficient response system of MOE

- Necessity of proper management system to secure effectiveness of decontamination works in various and broad areas
- Incompleteness of reception and transaction system of inappropriate decontamination reports

**MoE “Securing Appropriate Decontamination Works” Jan.18, 2013**

Expert Community

# Respond to requests for broader information and advice

- Contacted specialists in many fields - environment, ocean, health, social aspects, etc.
- Ongoing dialogues, consultation
- Only possible on the basis of trust
- Provide summaries of complex issues in social media outlets
- Primary purpose: to help people identify reliable sources they can use for self-information



# Primary engagement avenues for the expert community:

- Initiate discussions
- Participate in conferences
- Publications
- Respond to questions





IAEA Expert Meeting, Feb. 2014



## Journal of Radiological Protection

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PAPER • OPEN ACCESS • FREE ARTICLE

# Safecast: successful citizen-science for radiation measurement and communication after Fukushima

Azby Brown<sup>1,3</sup>, Pieter Franken<sup>2,3</sup>, Sean Bonner<sup>2,3</sup>, Nick Dolezal<sup>3</sup> and Joe Moross<sup>3</sup>

Published 6 June 2016 • © 2016 IOP Publishing Ltd

[Journal of Radiological Protection](#), [Volume 36](#), [Number 2](#)

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**2533** Total downloads



# SAFECAST REPORT



Link: <http://blog.safecast.org/the-safecast-report/>

# SAFECAST REPORT

- First published 2015, second edition 2016
- Purpose: To collect, update information on issues of most concern, and provide guide to reliable sources.
- Also, to discuss controversies, summarize arguments
- Over 100 pages, produced by volunteer effort
- Japanese translation will be released soon.

Link: <http://blog.safecast.org/the-safecast-report/>

# SAFECAST REPORT

Issues discussed include:

- Environmental impacts as evaluated in scientific studies
- Remediation policy and implementation
- Forest remediation issues
- Longterm storage issues
- Social and economic consequences
- Communication and messaging
- Dissenting and critical voices

Link: <http://blog.safecast.org/the-safecast-report/>



# SAFECAST REPORT

## Contents:

- Part 1: SAFECAST project update
- Part 2: Situation Update
  - 2.1: Issues at Fukushima Daiichi NPP
  - 2.1: Evacuees and Returnees
  - 2.3: Environment and Decontamination
  - 2.4: Food
  - 2.5: Health

Link: <http://blog.safecast.org/the-safecast-report/>

# SAFECAST REPORT

Sources used in Environment and Decontamination section (terrestrial impacts) include:

- 28 official reports (UNSCEAR, IAEA, JAEA, Japan Env. Ministry, etc)
- 31 peer-reviewed papers
- 21 journalistic articles
- 8 NGO reports (int'l and local organizations)

Link: <http://blog.safecast.org/the-safecast-report/>

MEDIA





We've found it's necessary to educate media as well.



We make ourselves  
available for almost every  
media request

(video examples)



Increasingly we are consulted  
as a reliable and unbiased  
source on Fukushima issues.

WorldViews

## Japanese nuclear plant just recorded an astronomical radiation level. Should we be worried?

**So should the people who live in Japan, who live on the Pacific basin be freaking out?**

Not yet, some analysts say.

Although the radiation level is “astoundingly high,” says **Azby Brown of Safecast**, a citizen science organization that monitors radiation levels, it doesn’t necessarily signify any alarming change in radiation levels at Fukushima. It’s simply the first time they have been measured that far inside the reactor.

Feb. 8, 2017

# The President in Conversation With MIT's Joi Ito and WIRED's Scott Dadich



**WIRED**



What is the most desirable kind  
of engagement ?  
(practically and ethically)

Decide > Announce > Defend



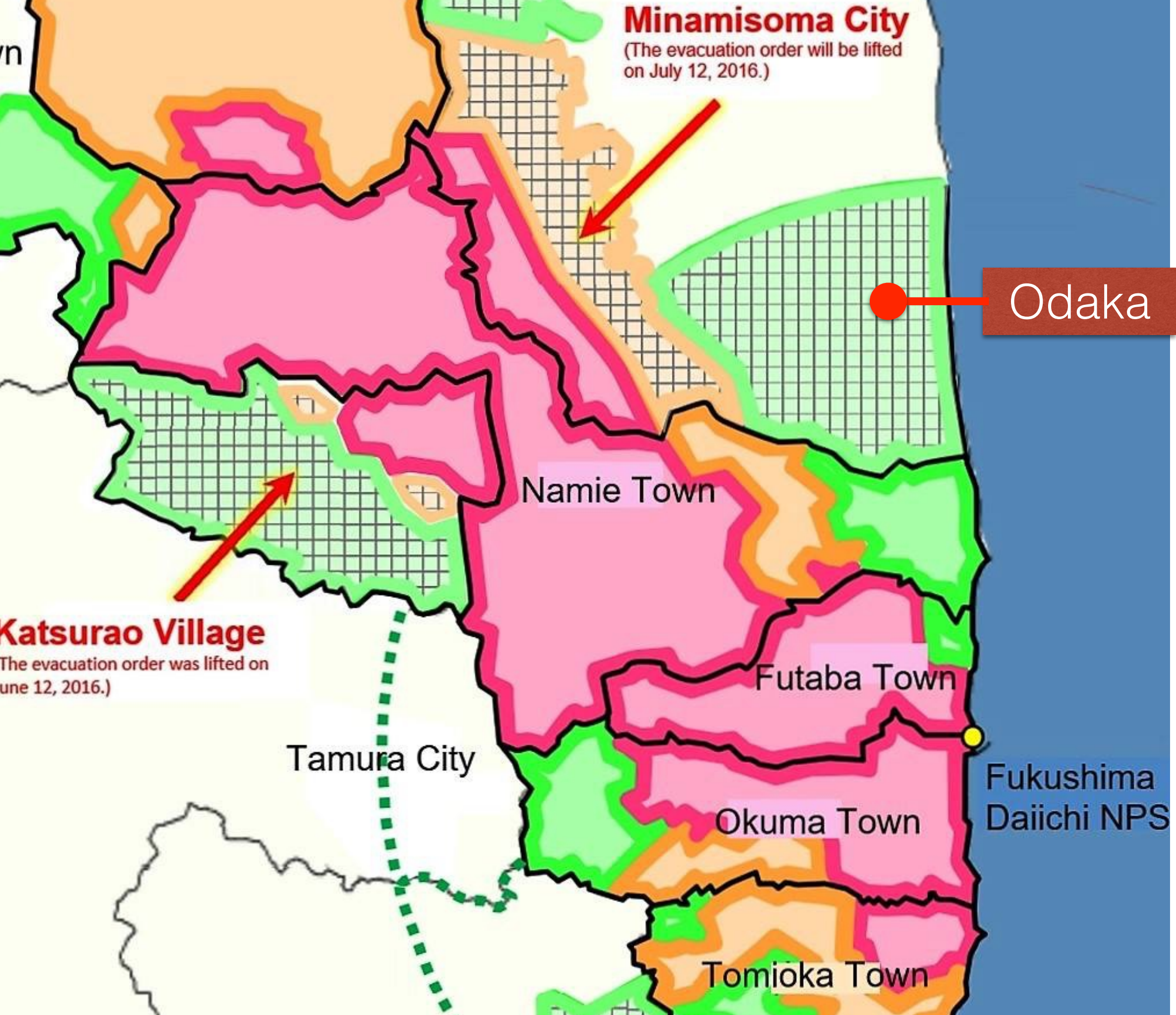
Involve citizens in planning,  
execution, and oversight

Only practical when coordinated  
at local level, with good, trusted  
leadership !

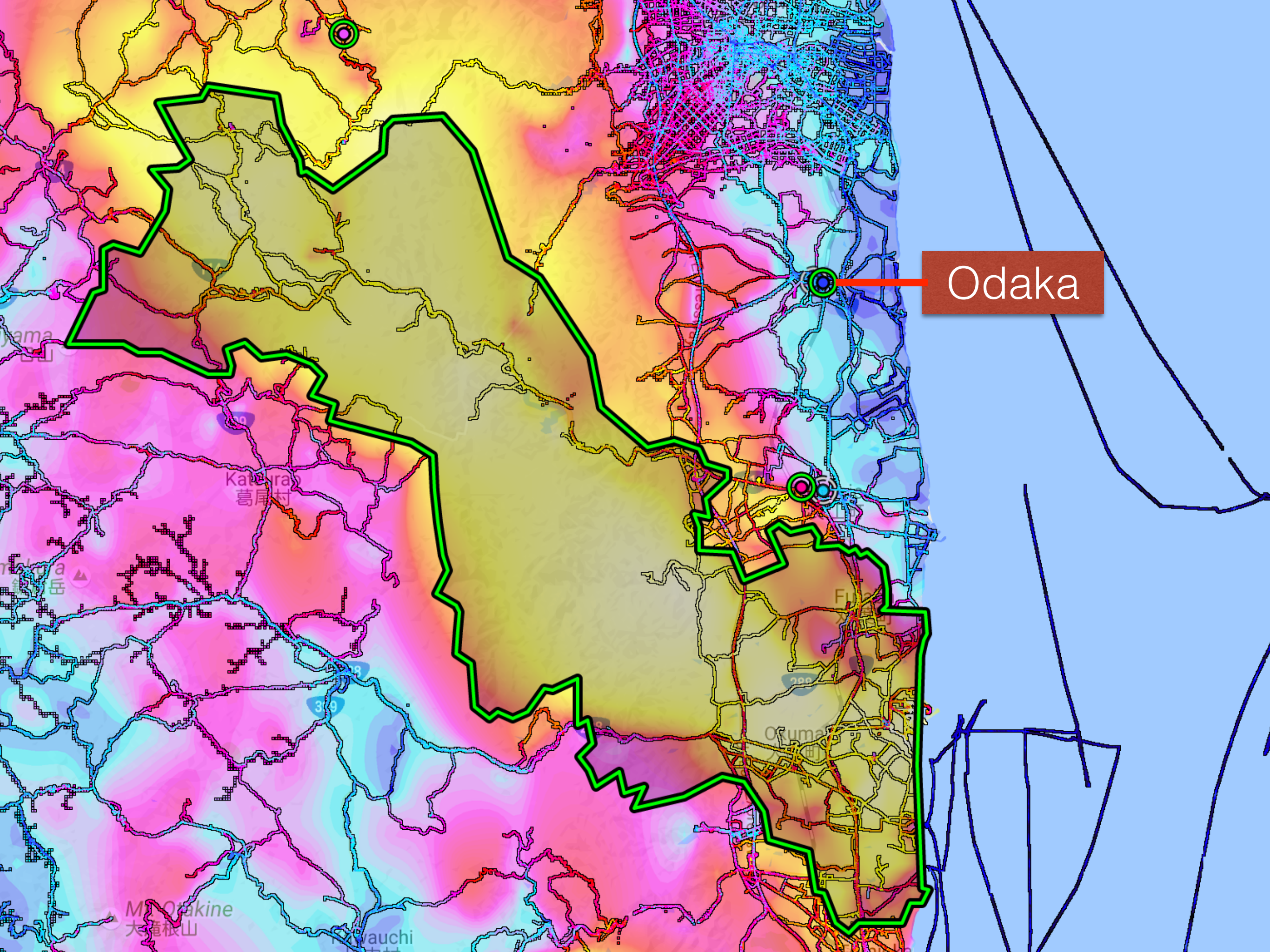












Odaka



There are many citizen-based monitoring programs in Fukushima now, for food, environment, health, etc.

- Most are very local.
- When asked, most agree that their findings are similar to gov't's.
- Most do not want to participate in official projects, but local gov't's refer citizens to them.

# Story: EcoTech Clean Center

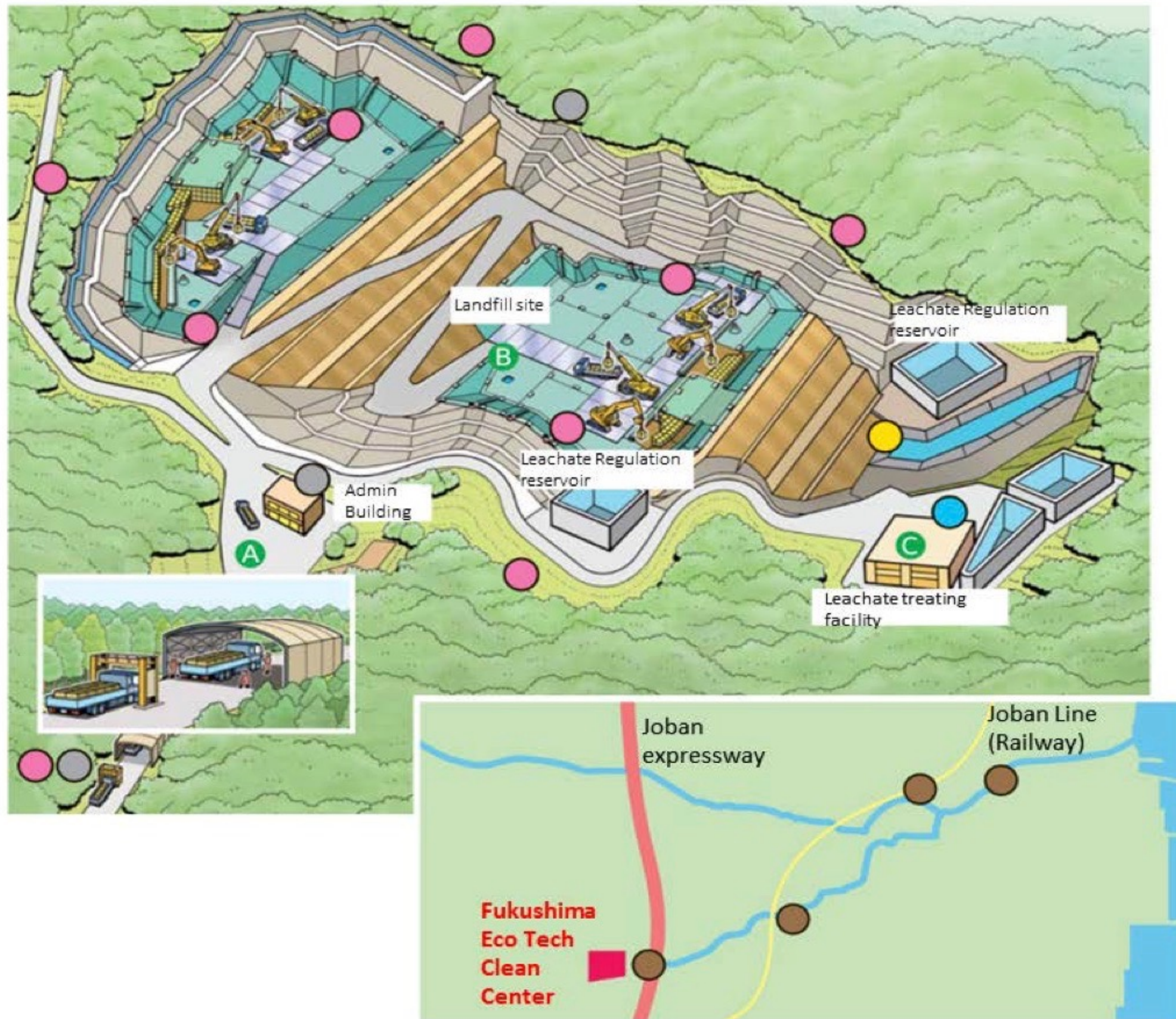
An interim treatment and storage facility for decontamination waste has been planned near FDNPP in the towns of Futaba and Okuma. Specialists have given the plans high marks. But delays in obtaining land-use permissions etc. made it necessary to use a smaller, pre-existing landfill facility, called EcoTech Clean Center. It was described in the Safecast Report 2016.

I recently tried to obtain permission to visit the site. The experience highlighted continuing issues regarding openness that we believe need to be addressed.









EcoTech Clean Center, Naraha, Fukushima



“Teamware”  
Mobile, Web

<https://slack.com/>

END



SAFECAST