

CLEAN Social Network Analysis

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CLEAN Call November 1, 2022



CLEAN

Nationally renowned, award-winning, online clearinghouse featuring:

- Collection of 800+ high-quality, peer-reviewed climate and energy education resources
- Pedagogic support/classroom readiness guidance
- Vibrant community of practice (CLEAN Network)



The screenshot shows the CLEAN website homepage. At the top, there are navigation links: "Explore the Collection", "Teaching Climate and Energy", and "Get Involved". The main header features the CLEAN logo, which consists of a stylized globe made of colored blocks and the text "CLEAN Committed to Climate and Energy Education". Below the logo is the section "Teaching about Climate and Energy?" with a sub-header "Our team of educators and scientists has reviewed and organized the best free teaching resources for K-12 through college." There is a search bar with the placeholder text "Search the award-winning collection" and a "Go" button. Below the search bar are tabs for "Entire Collection", "Activities", "Videos", and "Visualizations". A featured resource box titled "Great Energy Debate" is highlighted, showing a thumbnail of a hand holding a globe and a description of a debate-style learning activity. A red arrow points to the "Get Involved" link in the top navigation bar. At the bottom, there is a section titled "Get Started Teaching Climate and Energy" with a sub-header "Easy-to-read explanations of science and policy, designed to step students through the key principles of climate and energy". This section includes a list of bullet points: "Suggested teaching approaches, selected for various grade levels", "Spanish-language versions", "Supporting materials from the CLEAN reviewed collection", and "Culturally relevant climate teaching". A button labeled "Explore Teaching Climate and Energy" is at the bottom of this section. The background of the bottom section features a row of wind turbines.



Get Involved

CLEAN is a community effort, brought to you by scores of educators, scientists, and curriculum developers. There are many ways to become part of this project. Join us!

Join the CLEAN Network

Weekly teleconferences, gatherings at professional meetings, and active listerv discussions

Get Involved with CLEAN

CLEAN is a community effort, brought to you by scores of educators, scientists, and curriculum developers. There are many ways to become part of this project.

Join the CLEAN Network » a professionally diverse community of over 800 members committed to improving climate and energy literacy for all.

- Suggest a Resource: Nominate teaching materials to be reviewed for inclusion in the CLEAN collection.
- Participate in the CLEAN webinar series held in spring and fall each year.
- Sign up for our monthly STEM Flash newsletters and get topically focused climate and energy inspiration right in your inbox.
- Become a CLEAN Teacher Ambassador

Get Involved »

The CLEAN Network is a community of practice of climate and energy education professionals committed to improving climate and energy education efforts.

CLEAN Network

A professionally diverse community of over 800 members committed to improving climate and energy literacy locally, regionally, nationally, and globally, to enable responsible decisions and actions. The CLEAN Network has been a dynamic group since 2008 and is now led by the [CLEAN Leadership Board](#) established in 2016.

Join the Network to get access to a vibrant email list where members share ideas and resources related to climate and energy literacy and coordinate events. You'll also get the details on our weekly telecons right into your inbox.

Join the CLEAN Network

Email list archive

Weekly Telecon

Tuesdays at 1pm Eastern time CLEAN Network members meet in a teleconference to collaborate and share information about their literacy work, upcoming events, opportunities for collaboration or funding. Frequently guest speakers present on the topic of climate and energy literacy.

Recent and upcoming telecon topics and speakers »



Vibrant community of educators, scientists, science educational professionals, government agency reps, etc.

Active email list

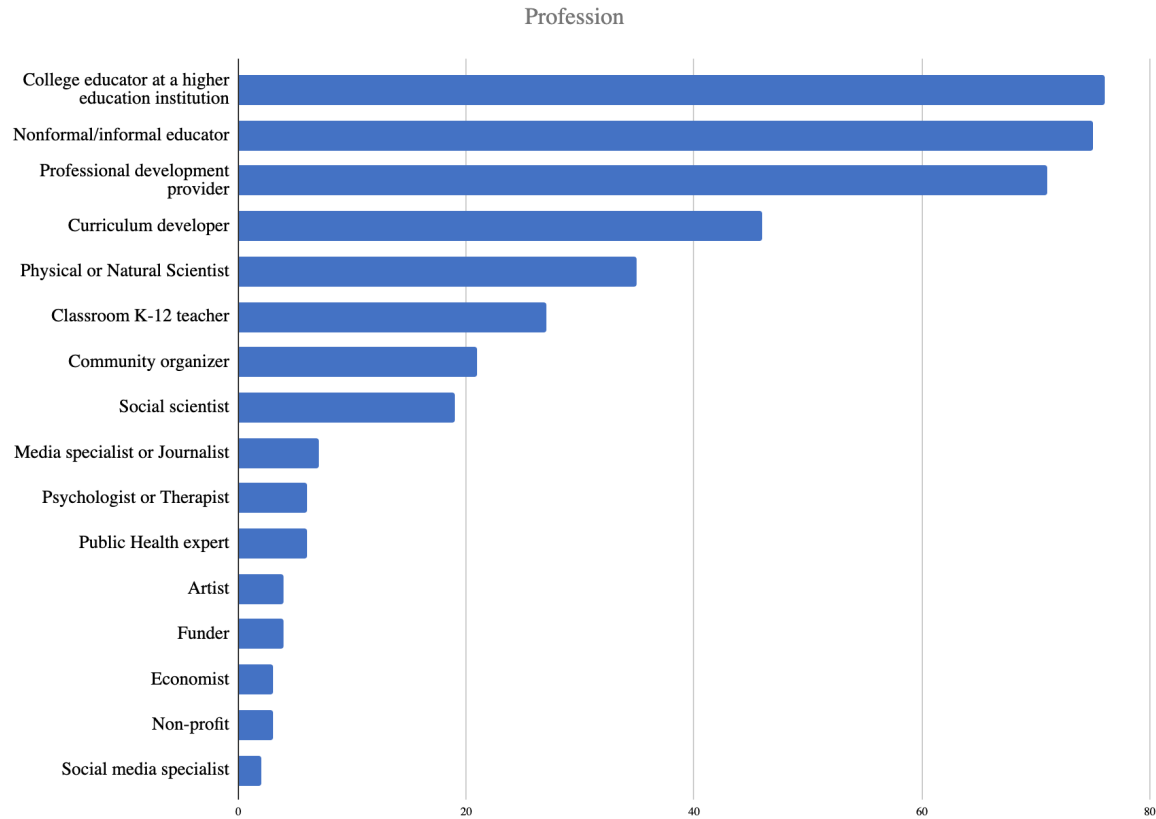
Weekly teleconference calls

CLEAN Network

CLEAN Network Information

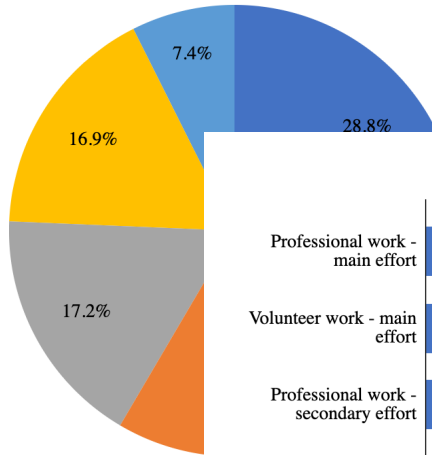
Survey Results

Our Work



Educators/Educator support
Scientists
Community Organizers

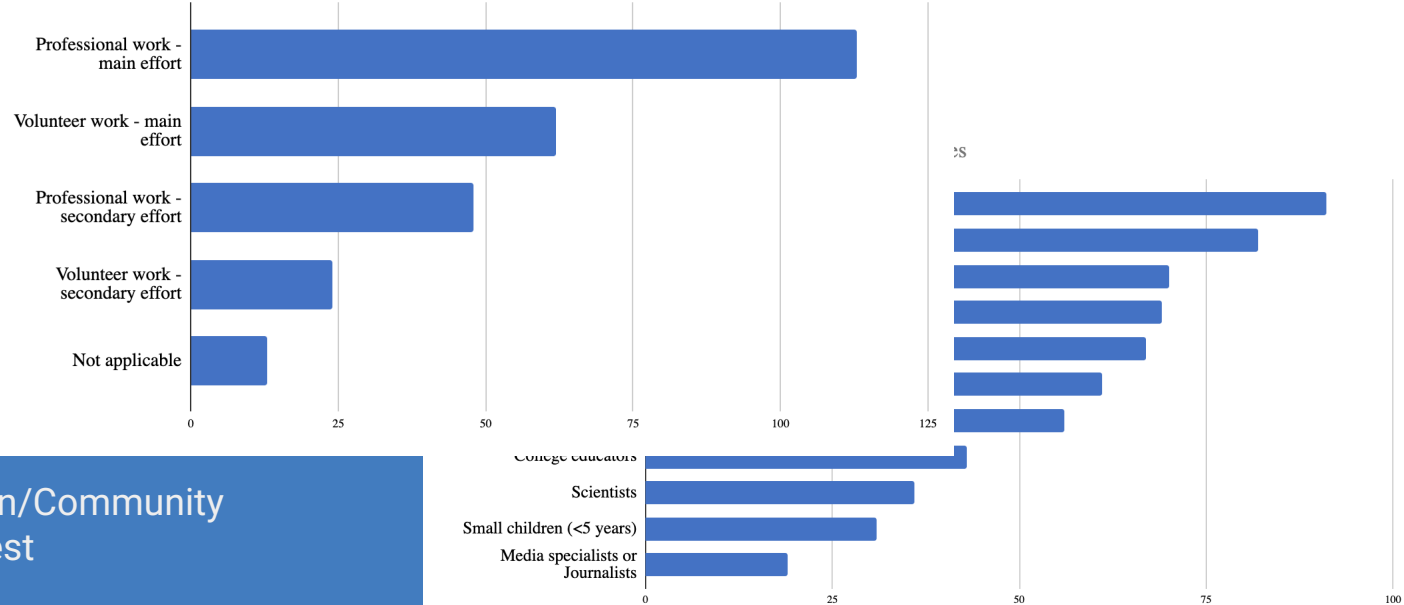
Climate Dimensions



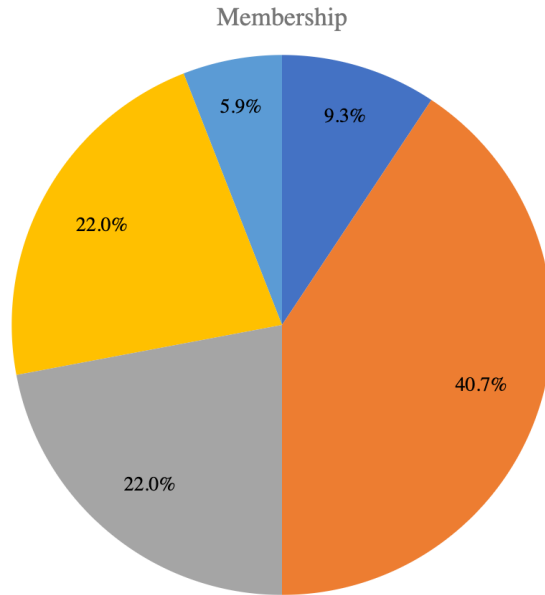
- Climate and Energy Education
- Climate Action
- Workforce Development in Climate and Energy
- Climate Policy

Our Work

Capacity



- Education & Action/Community Engagement largest
- Policy smallest
- Work with youth, students, educators

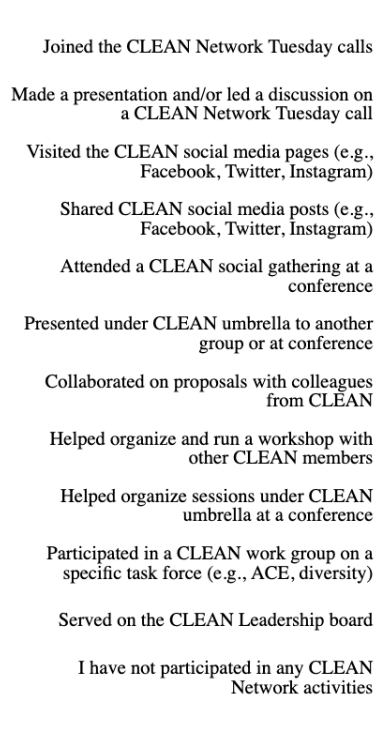


- Member from beginning, 13 years ago (2008)
- 9-12 years ago (2009-2011)
- 5-8 years ago (2012-2016)
- 2-4 years ago (2017-2020)
- Within the last year

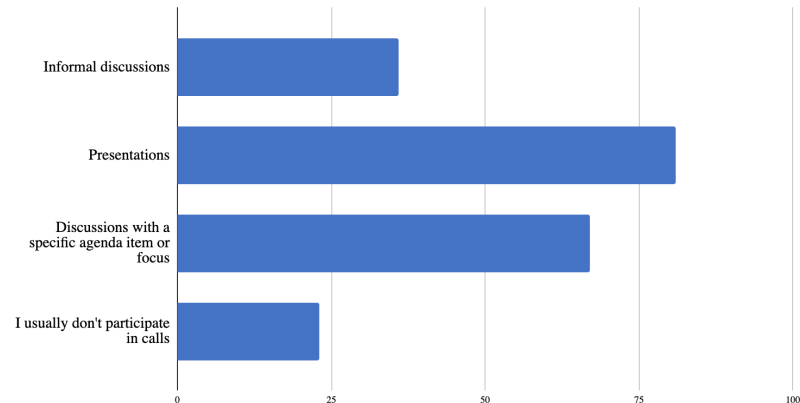
Membership

- Most joined in last ~decade
- Consistent new membership

Participation in CLEAN Network Activities



Participation in Tuesday Calls by Type



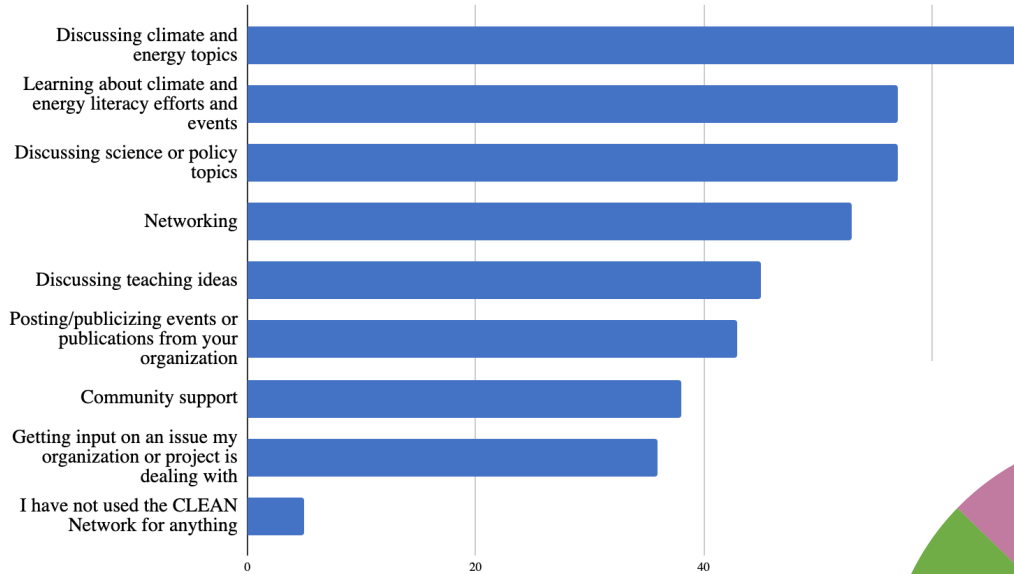
Tuesday Calls

Social Media

Conferences

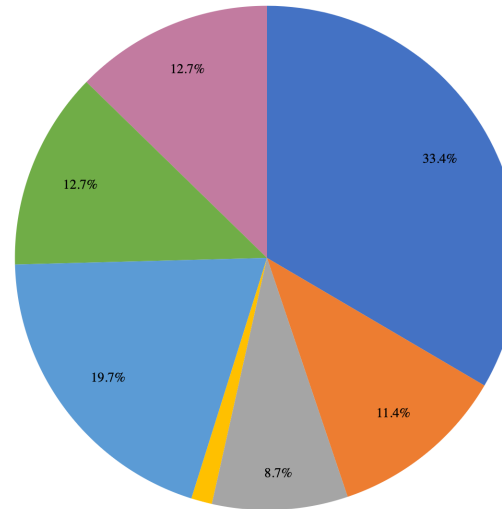
Network Use

Use of CLEAN Network



Discussions
Networking
Communications/
marketing

Interaction Platforms



● Email ● Facebook ● Twitter ● Instagram ● Conferences ● Professional organizations websites ● Listervs

Email
Conferences
Social media
(CLEAN emails are read sometimes to frequently)

Social Network Analysis Maps

Survey Results

SNA Measures

	# Nodes	# Ties	Average Degree	Density	Components	Connectedness	Diameter
Education-People	403	616	1.529	0.004	128	0.23	9
Education-Organizations	183	484	2.645	0.015	41	0.61	6
Action-People	302	320	1.06	0.004	156	0.029	6
Action-Organizations	141	208	1.475	0.011	64	0.297	8
DEIAR-People	294	284	0.966	0.003	161	0.034	9
DEIAR-Organizations	130	144	1.108	0.009	69	0.204	8
Workforce-People	232	126	0.543	0.002	170	0.008	3
Workforce-Organizations	124	102	0.823	0.007	77	0.13	7
Policy-People	195	64	0.328	0.002	165	0.01	5
Policy-Organizations	117	88	0.752	0.006	78	0.109	9

Findings

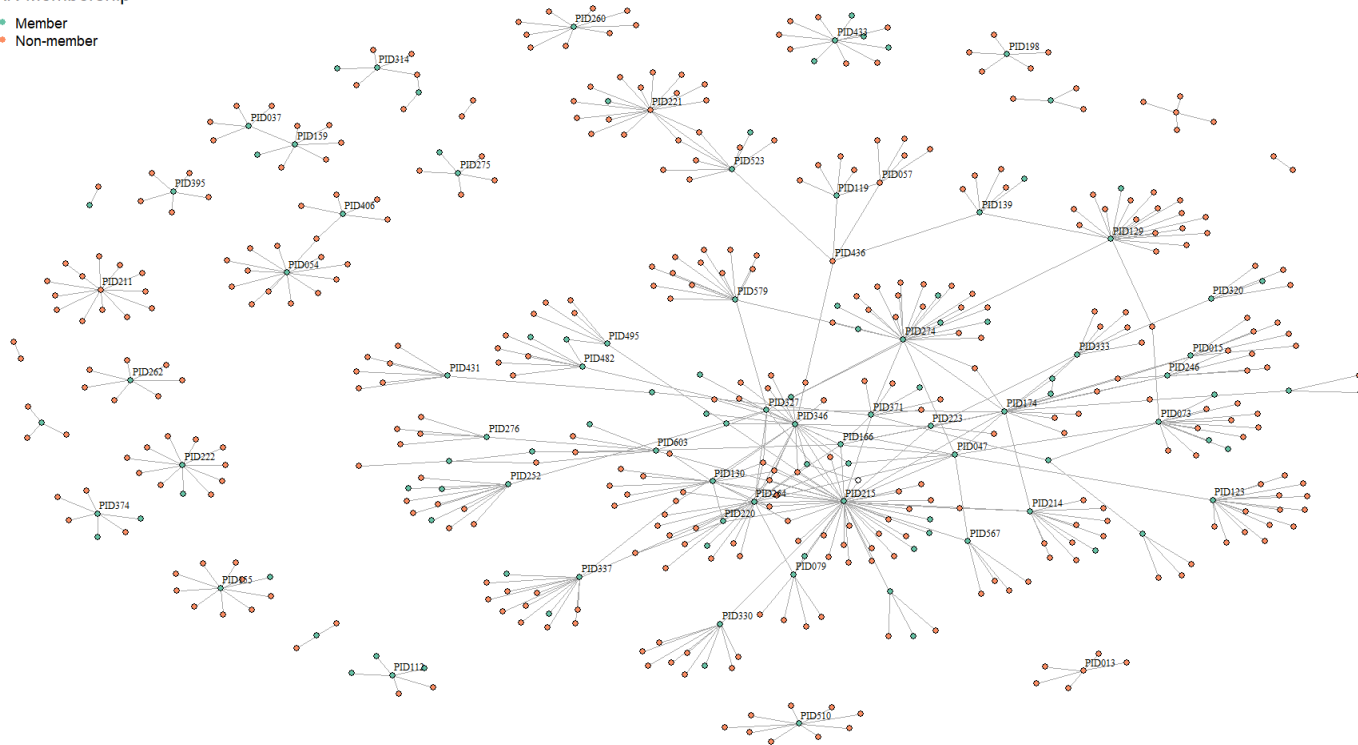
**Organizations with highest degree centrality across four dimensions were independent (Education, Action, DEIAR, Workforce). Others were CLEAN partners, leadership board members, and organizations with ties to central figures in CLEAN Network*

ALL ORGANIZATIONS



CLEAN Membership

- Member
- Non-member



ALL PEOPLE

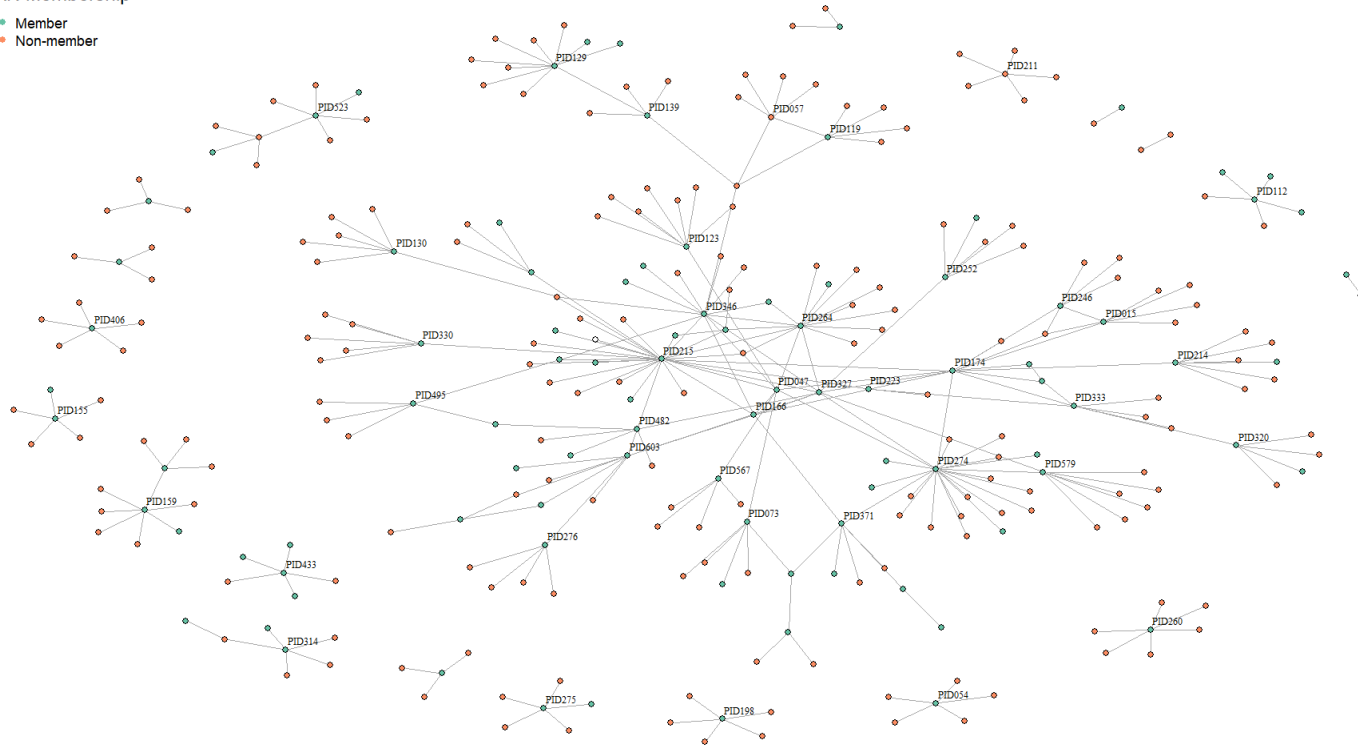
EDUCATION ORGS



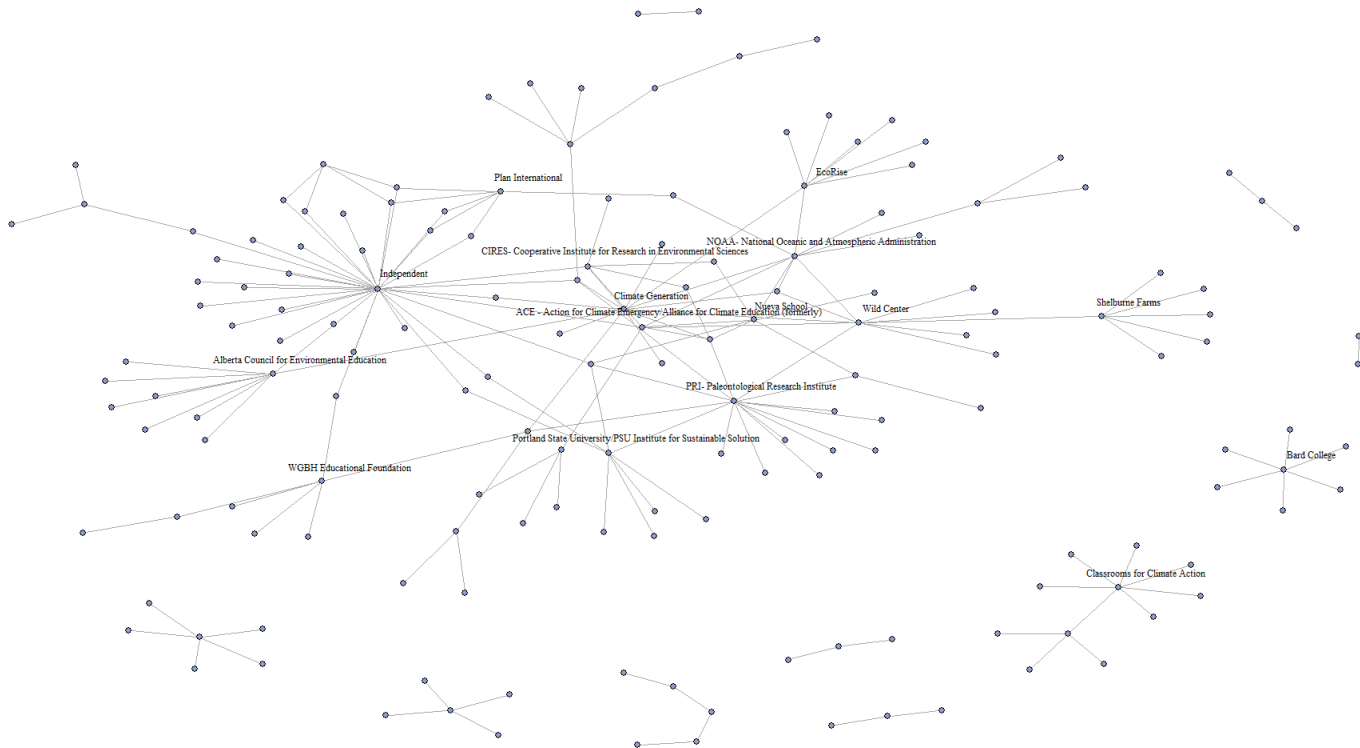
EDUCATION PEOPLE

CLEAN Membership

- Member
- Non-member



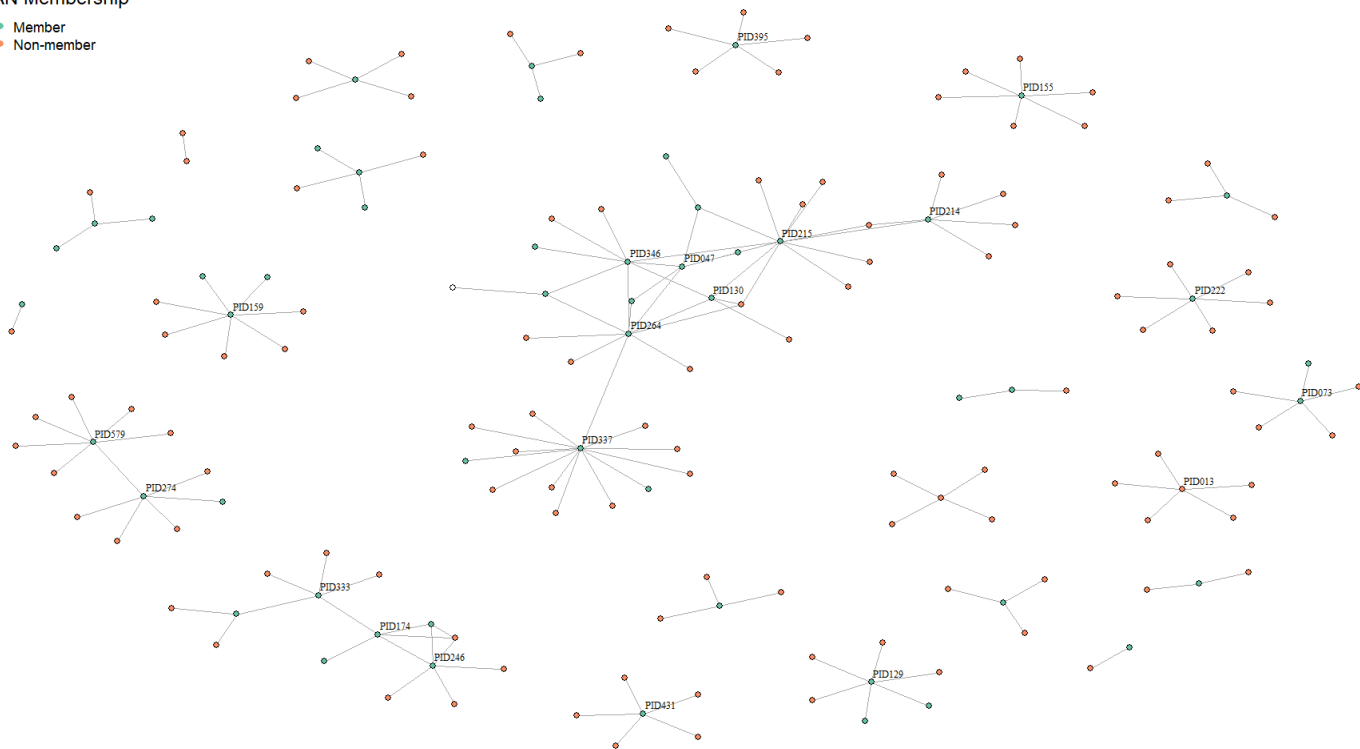
ACTION ORGS



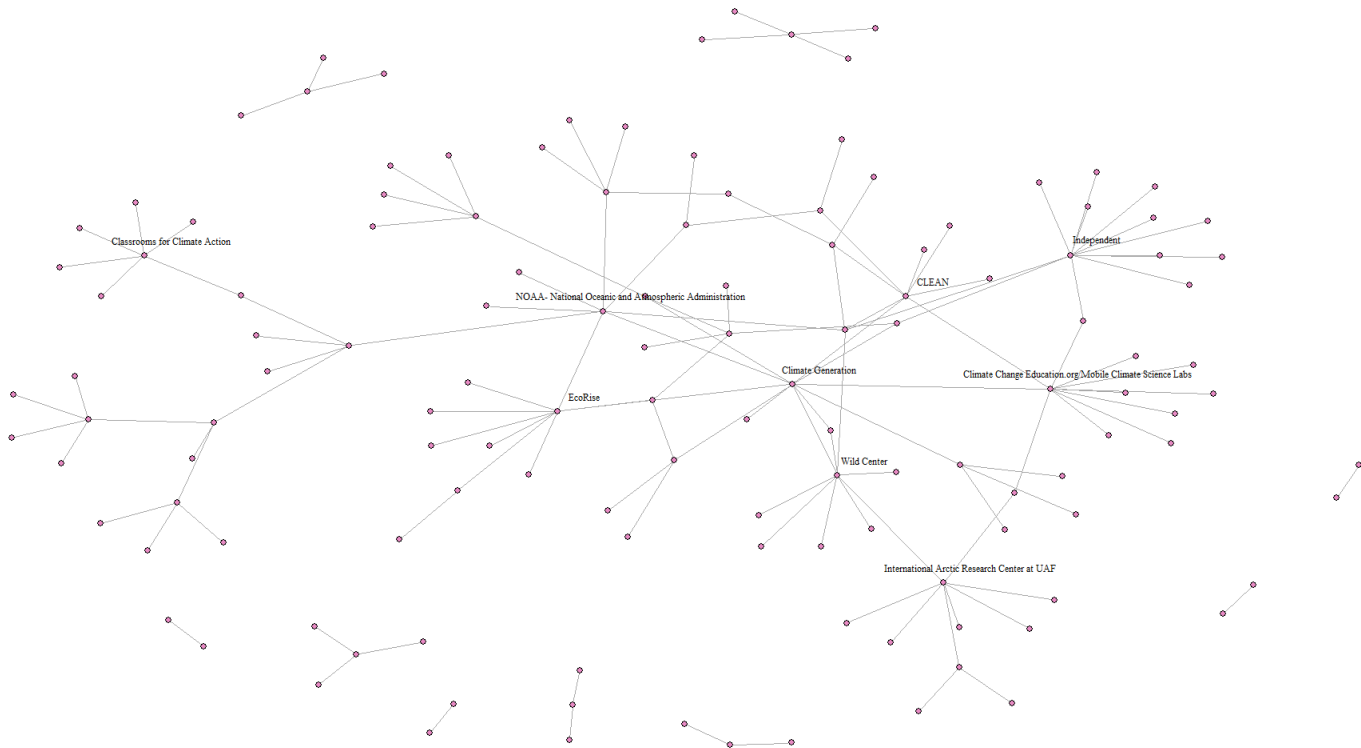
ACTION PEOPLE

CLEAN Membership

- Member
- Non-member



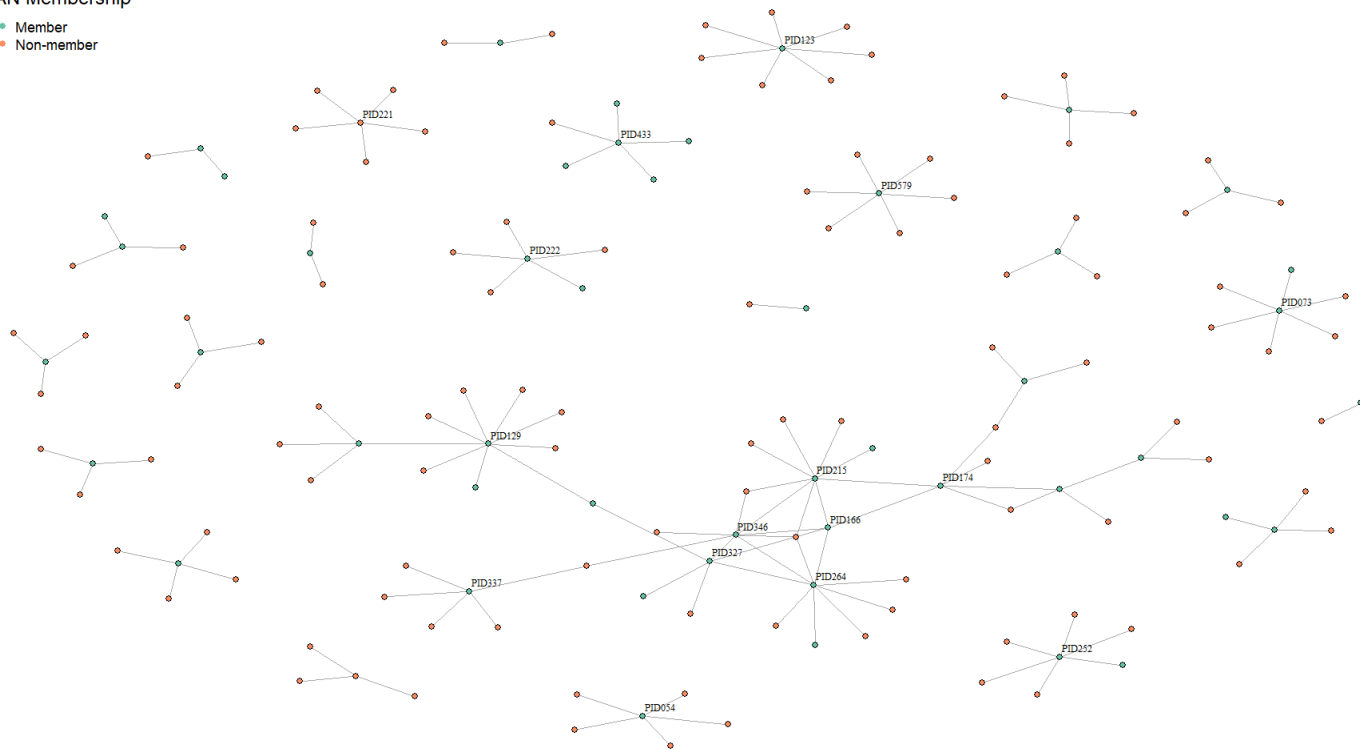
DEIAR ORGS



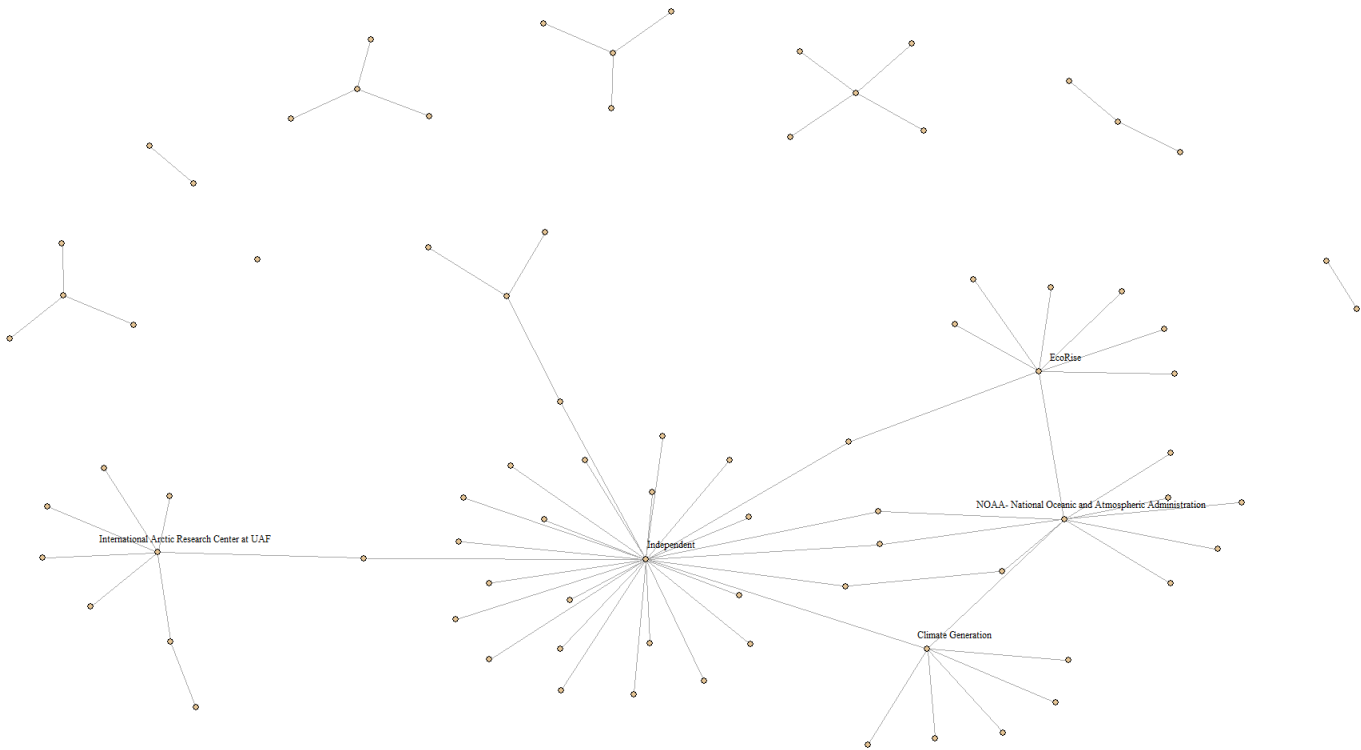
DEIAR PEOPLE

CLEAN Membership

- Member
- Non-member



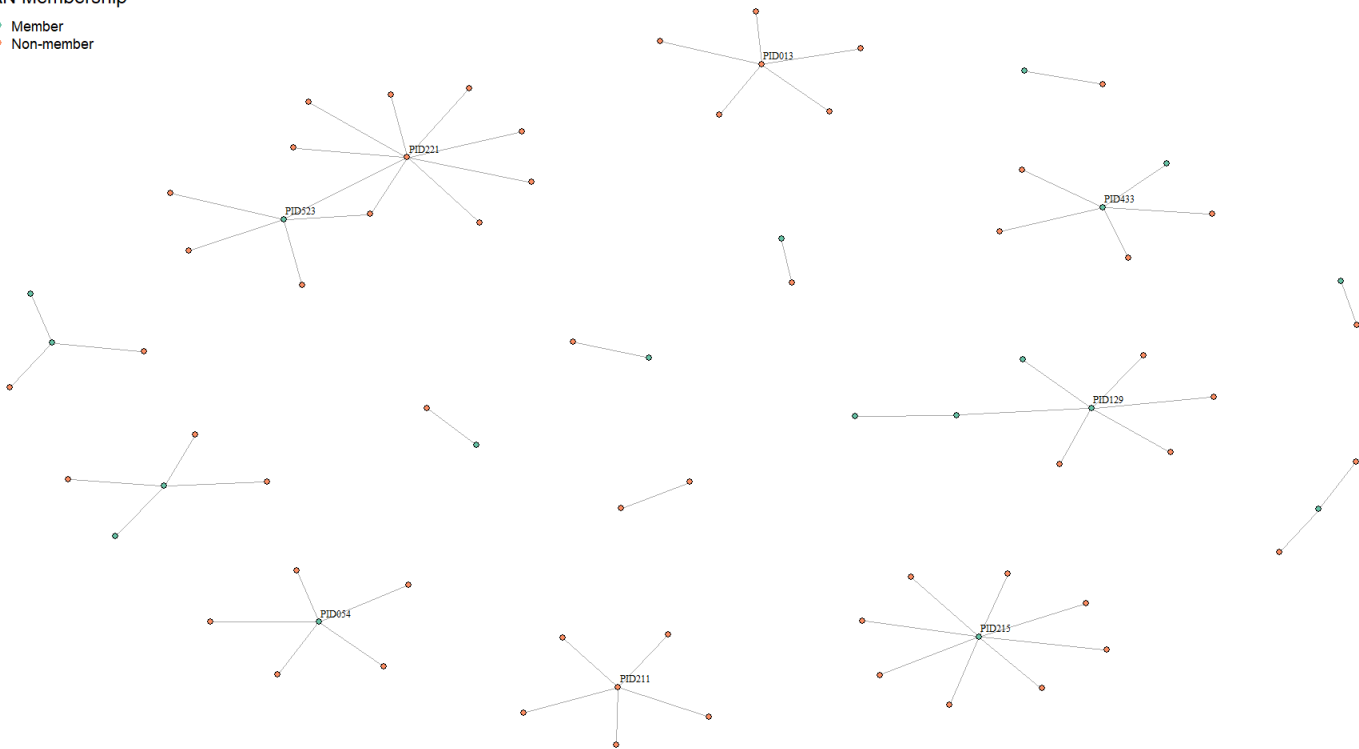
WORKFORCE ORGS



WORKFORCE PEOPLE

CLEAN Membership

- Member
- Non-member



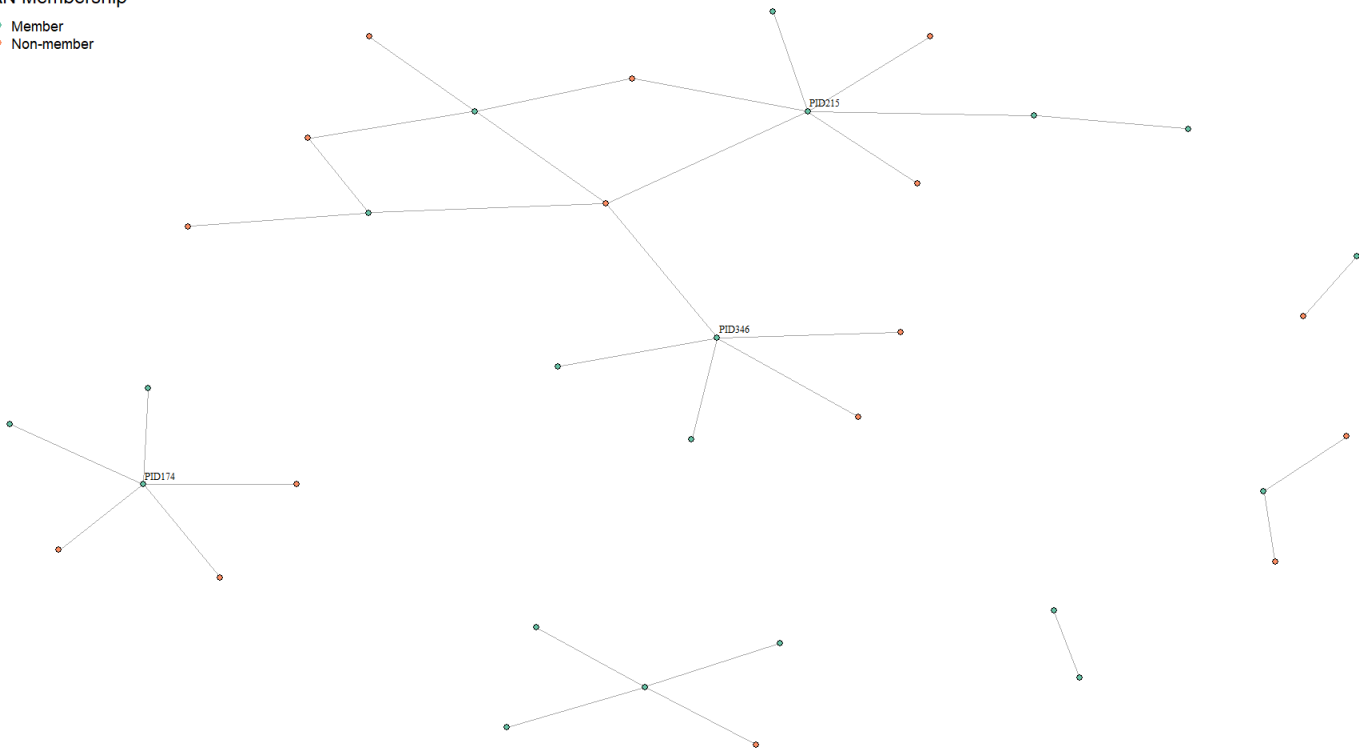
POLICY ORGS



POLICY PEOPLE

CLEAN Membership

- Member
- Non-member



NEXT STEPS

Grow the Network

Send invitations to non network members

Ask key nodes to send invitations to connections

Increase Centrality

Invite key nodes to participate more

Find ways to make more connections (e.g. ACCELS)

Landscape Analysis

Survey connections listed and reanalyze data to get a better picture of the larger climate education field (defined broadly)

Funding??

With ACCELS evaluation data, hoping to use this to find funding for CLEAN Network activities

Conclusions



- CLEAN is professionally diverse



- People find value in CLEAN



- CLEAN can be considered a backbone organization for climate education work



- CLEAN is important for sharing information
 - Communication happens through the network



- Bridgers are important for connecting members & non members as well as regional hubs



- CLEAN strongest in education with bridges to other fields/dimensions



THANKS

Questions?

Please follow CLEAN updates

clean@colorado.edu
<https://cleanet.org>

