## Communication Strategies of NGOs: Theory and Evidence

-Work in Progress-

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Montpellier, November 2016

#### Background: What do NGOs do?

- 1. Implement or subsidize projects in the field [not in this paper]
- 2. Advocacy
  - Lobby to influence policy making (public politics)
  - Influence firms' and stakeholders' behavior (private politics) Information campaigns, boycotts, environmental labeling
- 3. Fundraising

## NGO advocacy and information

Information is their main instrument to influence social/environmental outcomes:

- 1. they observe corporate behavior and its social/environmental impact
- 2. and convey this information to stakeholders willing to pay for a better environment and to policy makers

Their communication may have tremendous impacts

 Volkswagen and the International Council for Clean Transportation (ICCT)

NGOs rank highest in trust (e.g. Globescan "Trust in Institutions")  $\hookrightarrow$  NGOs send credible information to stakeholders.

### Good Cops and Bad Cops:

Cheering the leaders or booing the laggards?

- Lyon (ed.) (2010): analysis of the strategies of NGOs towards business, through a number of cases
- In certain cases they transmit good news They provide information on environmentally/socially friendly firms: they cheer the leaders
  - In other cases, they mostly transmit bad news on corporations: they signal the laggards









# Great news! PRIMARK<sup>®</sup> commits to Detox

www.greenpeace.org/detox

#### Data

- Source: Covalence EthicalQuote
- 22,942 pieces of news published by 634 NGOs on their own websites about the activities of 658 firms
- Period: 2002-2014
- A piece of news:

```
NGO + Firm + Criterion + Date + Good or Bad
```

 50 Criteria, grouped in 7 dimensions.
Example: the dimension "Environment" contains criteria such as "Energy", "Emissions" and "Waste Management".

## News examples (1/3)

Date	13/6/2006
NGO	Corpwatch
Firm	Coca-Cola
Sector	Food, Beverage & Tobacco
Country	Uzbekistan
Dimension	Human Rights Policy
Good or Bad	Bad
Content	Coca-Cola accused over Uzbek venture
	Coca-Cola has been hit with an arbitration claim seeking more than
	\$100m in damages, alleging that the world's largest soft drinks maker
	conspired with the government of Uzbekistan against a joint venture partner
	who fell out of favour with the country's authoritarian ruler, Islam Karimov.
	The claim comes as the company is already trying to repair its image
	in the face of lawsuits from labour groups in the US over allegations
	that it turned a blind eye to human rights abuses at its bottling plants
	in Colombia and Turkey.

## News examples (2/3)

Date	19/8/2003
NGO	Greenpeace
Firm	Volkswagen
Sector	Automobiles & Components
Country	Netherlands
Dimension	Environment
Good or Bad	Good
Content	Profile: Volkswagen
	Product Innovation: Volkswagen has agreed to reduce
	the amount of polyvinyl chloride (PVC) in their products.

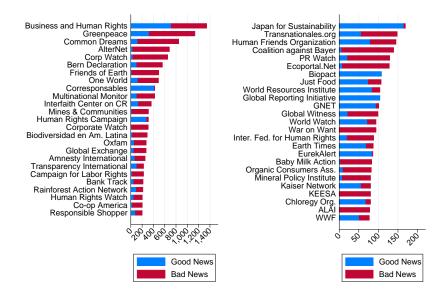
## News examples (3/3)

Date	30/10/2014
NGO	Friends of the Earth
Firm	TransCanada
Sector	Energy
Country	USA
Dimension	Energy
Good or Bad	Bad
Content	Energy East Pipeline: Concerned Citizens in U.S. and Canada
	Pledge to Block TransCanada's Latest Tar Sands Scheme
	TransCanada has been a bad neighbor and a bully, and has misled
	landowners and local authorities, said Jane Kleeb of Bold Nebraska.
	() American environmental organizations have committed
	to standing with their Canadian counterparts in blocking this project

#### Share of bad news over time



#### Top 50 NGOs



#### Question

## Why and when do NGOs cheer the leaders or, conversely, signal the laggards?

(When do they play Good Cop or Bad Cop?)

Two sets of explanations:

- Because they seek to maximize their impact on firms / stakeholders / public authorities' behavior?
- Because they seek to maximize donations which finance their activities?

## In the (economic) Literature

Public and private politics by activists

- Theoretical papers that do not explicitly model the informational behavior of NGOs
- David Baron (2001, 2003, 2009, 2013)
- ▶ Daubanes & Rochet (2015) on activists in the policy game
- NGOs and globalization (Krautheim & Verdier, 2015, Aldashev, Limardi & Verdier, 2015)

NGOs communication

- Lyon & Maxwell (2011): greenwashing under threat of audits by NGOs
- Feddersen & Gilligan, 2001: NGOs as information providers on product markets
- Couttenier & al. (2015): strategic timing and targeting of NGOs' communication

#### What we do

A theory in which a NGO strategically chooses its communication to influence social outcomes

- we disentangle between Good News and Bad News
- ▶ in a framework where communication is limited

Two main predictions:

- 1. In a given situation, the NGO polarizes (either as a good cop or a bad cop)
- 2. The NGO play Bad Cop when the communication constraint is tight, Good Cop otherwise

Empirical evidence supporting the theoretical predictions

- using panel data, on 22,992 pieces of news communicated by 634 NGOs over the period 2002-2014
- Controlling for donation-maximizing behavior

Theory

## A model of NGO as information intermediary

#### A market situation with:

- A continuum of corporate activities, which can be good or bad. The initial share of good activities is γ.
- 1 representative stakeholder, does not observe quality directly, but can take actions to remove an activity from the market
  - A consumer, a shareholder, a regulator...
- ▶ 1 NGO that observes quality and can inform the stakeholder

#### The stakeholder

#### Preferences

- The value of any good activity is V
- The value of any bad activity is V E with V < E.
- The expected value for a belief  $\theta$  that the activity is good is:

$$w(\theta) = V - (1 - \theta)E.$$

#### Actions

- $\blacktriangleright$  She removes from the market any activity such that  $w(\theta) < 0$ 
  - ► The precise mechanism, and how the surplus between the firm and the stakeholder is shared, is irrelevant.

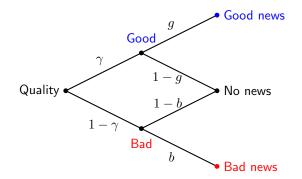
#### Assumption

- $\blacktriangleright$  In the absence of disclosure, the stakeholder accepts all activities:  $w(\gamma)>0$ 
  - Before disclosure, activities are in the market
- Hence her objective is to remove bad activities from the market

## The NGO

- Its objective is to drive bad activities out of the market
  - Preferences aligned with the stakeholder so that the NGO is credible
- It observes the quality of individual activities and can disclose this information to modify stakeholder payoff w(θ) through Bayesian revision.
- However, communication is limited. The NGO can only disclose the quality of a share λ of activities
  - To digest information is costly; limited space in the media or on the website; limited stakeholder attention
- Therefore it needs to select the news/activities
  - Good news or bad news?
- ► Assumption: λ < min{γ, 1 − γ} (otherwise all the information can be transmitted.)</p>

#### Communication structure

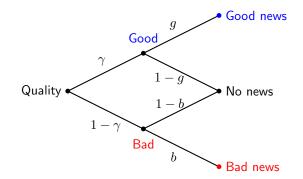


At the beginning of the game, the NGO chooses g and b, respectively the shares of good and bad news reported.

• g > b: Good Cop; g < b: Bad Cop

▶ Under the communication constraint:  $\gamma g + (1 - \gamma)b \leq \lambda$ 

#### Stakeholder's posterior beliefs



After disclosure, the belief that a given activity is good is

- $\theta = 1$  when the stakeholder receives a good news
- $\theta = 0$  if she receives a bad news
- ▶  $\theta = \mu(g, b) = \frac{(1-g)\gamma}{(1-g)\gamma+(1-b)(1-\gamma)}$  if she does not receive any news

#### Equilibrium Analysis

Bayesian equilibrium where:

- the NGO chooses (g, b)
- the stakeholder rejects a given activity or not based on (consistent) posterior belief on quality
- The NGO maximizes:

$$\begin{array}{ll} g\gamma \times V & \mathsf{known \ good} \\ + \ b(1 - \gamma) \times 0 & \mathsf{known \ bad} \\ + \ ((1 - g)\gamma + (1 - b)(1 - \gamma)) \times \max(w(\mu(g, b)), 0) & \mathsf{unidentified} \end{array}$$

For unidentified activities, the stakeholder removes from the market if and only if w(µ(g, b)) > 0.

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- Bad news also **increase** the no-news belief  $\mu(g, b)$ 
  - Some bad activities being identified, the stakeholder knows the share of good activities is higher in the subset of activities that remain unidentified.

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- But this change in µ has no incidence on stakeholder behavior: She has simply more reasons to accept these activities than before disclosure

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The effect of **bad news** is direct: to remove identified bad activities from the market.

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The effect of good news is indirect. They damage the collective reputation of unidentified activities, leading to their rejection if the quantity of news is sufficient.

#### Polarization

#### Proposition

In any given situation  $(\lambda, \gamma, V, E)$ , the NGO polarizes: the optimal communication strategy is to be either a good cop (b = 0) or a bad cop (g = 0), but not to send mixed news.

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- General idea: Polarization induces most change in the beliefs of the stakeholders, hence most change in behavior.
- If an NGO sends enough good news, unidentified products are driven out. Then it does not make sense to send bad news, since bad products are already out.
- If an NGO sends bad news, then sending good news on top does not help

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### Cheering the Leaders or Booing the Laggards?

#### Proposition

In a given situation  $(\lambda,\gamma,V\!,E)$ 

- ▶ if V < |V E|, the NGO always chooses bad cop
- ▶ if  $V \ge |V E|$ , the NGO chooses bad cop if and only if

$$\lambda < \frac{V - (1 - \gamma)E}{V - |V - E|}.$$

That is, bad cop if the communication constraint is tight

#### Intuition

#### Why a bad cop strategy when communication is limited?

- Bad news induce an incremental change in the market: The stakeholder rejects each activity that is identified.
  - The first news has an impact.
- Good news induce a radical shift of the market: The stakeholder rejects all unidentified products.
  - ► This only occurs if a sufficient amount of news is transmitted for w(µ) to become negative

## **Regression Analysis**

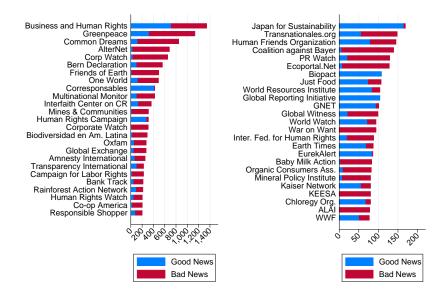
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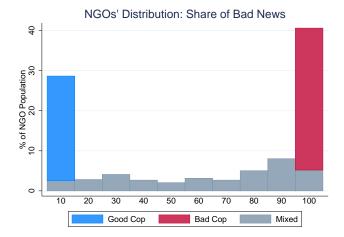
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NGO + Firm + Criterion + Date + Good or Bad
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 50 Criteria, grouped in 7 dimensions.
Example: the dimension "Environment" contains criteria such as "Energy", "Emissions" and "Waste Management".

### Top 50 NGOs



### Polarization of NGOs



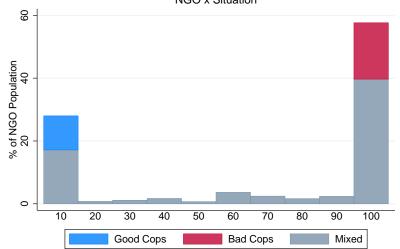
### Analysis at the situation level

- Big NGOs are not particularly polarized.
  - 38 percent of the NGOs are mixed; they emit 74 percent of the news
- ► Our theory predicts that a NGO polarizes depending on parameters' value ((λ, γ, V, E)
- A situation is defined as: sector x dimension x year and we assume the set of parameters (λ, γ, V, E) is NGO- and situation-specific.

# Prediction 1: NGOs polarize their communication in a given situation

All NGOs, with at least 2 news in the situation

### Distribution: Share of Bad News NGO x Situation



### Prediction 2: Econometric strategy

Theory says that NGO behaves as a good cop only if

$$\lambda < \frac{V - (1 - \gamma)E}{2V - E}.$$

• We assume  $\lambda$  is the number of news.

### Econometric specification

### Testable hypothesis

NGOs emitting a higher number of news in a given situation have a lower share of bad news.

 $\% BadNews_{isdt} = \beta \# News_{isdt} + \mathbf{FE_i} + \mathbf{FE_s} + \mathbf{FE_d} + \mathbf{FE_t} + \epsilon_{isdt}$ 

- ▶ %BADNEWS<sub>isdt</sub>: Share of Bad News disclosed by NGO i on firms from sector s on dimension d in year t
- ▶ #NEWS<sub>isdt</sub>: Total # of News disclosed by NGO i on firms from sector s on dimension d in year t
- ▶ **FE**<sub>i</sub>: NGO fixed effects
- ▶ **FE**<sub>s</sub>: Sector fixed effects
- $\mathbf{FE}_{\mathbf{d}}$ : Dimension fixed effects
- ▶ **FE**<sub>t</sub>: Time fixed effects

### Results All NGOs

Dependent Variable:	%BadNews				
	(1)	(2)	(3)		
#News	-0.783*	-0.931**	-0.787**		
	(0.397)	(0.391)	(0.298)		
NGO FE :	Yes	Yes	Yes		
Year FE :	Yes	Yes	-		
Sector FE :	Yes	-	-		
Dimension FE :	Yes	-	-		
Sector $\times$ Dimension FE :	-	Yes	-		
Sector $\times$ Dimension $\times$ Year FE :	-	-	Yes		
Observations	8,025	8,025	8,025		
R-squared	0.625	0.629	0.671		

### Results

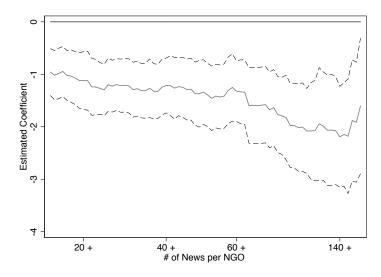
Mixed NGOs only

Dependent Variable:	%BadNews				
	(1)	(2)	(3)		
#News	-1.095**	-1.235**	-1.033**		
	(0.447)	(0.448)	(0.429)		
NGO FE :	Yes	Yes	Yes		
Year FE :	Yes	Yes	-		
Sector FE :	Yes	-	-		
Dimension FE :	Yes	-	-		
Sector $\times$ Dimension FE :	-	Yes	-		
Sector $\times$ Dimension $\times$ Year FE :	-	-	Yes		
Observations	5,371	5,371	5,371		
R-squared	0.409	0.418	0.508		

### NGO size

Dependent Variable:	%BadNews			
#NEWS: Big NGO	-1.153**	-1.353**	-1.417***	
	(0.462)	(0.444)	(0.374)	
#NEWS: Small NGO	0.214	0.200	0.872	
	(0.750)	(0.767)	(0.571)	
NGO FE :	Yes	Yes	Yes	
Year FE :	Yes	Yes	-	
Sector FE :	Yes	-	-	
Dimension FE :	Yes	-	-	
Sector $ imes$ Dimension FE :	-	Yes	-	
Sector $\times$ Dimension $\times$ Year FE :	-	-	Yes	
Observations	8,025	8,025	8,025	
R-squared	0.625	0.629	0.672	

### NGOs size All NGOs



### Placebo

We should not find similar results when estimating the effect of

- $\# NEWS_{isdt}$  on  $\% BADNEWS_{isd,t-1}$
- $\# NEWS_{it}$  on  $\% BADNEWS_{isdt}$
- $\# NEWS_{sdt}$  on  $\% BADNEWS_{isdt}$

### Placebo

Dependent Variable:	$\text{\%BadNews}_{t-1}$	%BadNews	%BadNews	
Sample:	restricted	restricted	all obs.	all ob
#News	0.197	-1.818***		
	(0.720)	(0.183)		
$\#NEWS: NGO \times Year$			-0.566	
			(0.412)	
#NEWS: Situation				0.57
				(0.66
NGO FE:	Yes	Yes	Yes	Yes
Year FE :	-	-	-	Yes
Sector FE :	-	-	-	Yes
Dimension FE :	-	-	-	Yes
Sector $\times$ Dimension $\times$ Year FE :	Yes	Yes	Yes	-
Observations	1,719	1,719	8,025	8,02
R-squared	0.753	0.722	0.671	0.62

### Alternative theory 1: NGO intrinsic preferences

- Theory: NGOs would have an intrinsic preference for sending either bad news or bad news
- Not true at least for the big ones which show mixed attitude (incl. Greenpeace)

Alternative theory 2: Corporate Donations

- NGO behavior would be driven by the preferences of their donors
  - NGOs receiving more corporate donations have more resources and thus can communicate more (a higher λ)
  - Corporate donors prefer good news (about themselves)
- We collect information on firms' donations to NGOs.
- Data source : iWave Verigift.
- Information from NGOs' annual reports (big donors)



### Donors July 1, 2006-June 30, 2007

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Appleson Foundation Changing Horizons Fund CS Fund Educational Foundation of America Russing Trust Russel Long and Ruth Krumbhaar Tides Foundation Wallace Clobal Fund Working Assets

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Allan and Marion Hunt-Badiner Alliance for Public Accountability Inc. Anonymous Arlia Schardt As You Sow Foundation Autodesk Inc. Compton Foundation. Inc. Cris Smith and Gail Gorlitzz Dan and Z Krinke David and Colleen Newlin David Rlair Dr. and Mrs. John B. Marks Dr Edith E Borie Dreamcatcher Fund Earthbound Organic Farms Edwardo Lao Phodes Elizabeth Steele Frances A. Dubrowski Frances W. Stevenson Fred and Annette Cellert Gail Raywid Cary R. Nelson George Martin Coldman Environmental Fund Grevstone Foundation Hillton Group Charitable Foundation HMIS Fund of The Community Foundation for the National Capital Region Jennifer and Ted Stanley lim and Linda Kubns John and Patty Brissenden Kelly Collamore Kenneth and Eugenia Lange Lary and Judy East Linda and Marc Lawrence Family Mariorie & Richard Rogalski Men's Wearhouse Microsoft Matching Cifts Program Morean Stanley Moscow Philanthropic Fund Mr Alan Field Mr. and Mrs. Don Lichty

### Controlling for corporate donations

- Dummy variable at the NGO x Firm x Year level (= 1 if the NGO has received a donation from the firm)
- No information about the amount.
- ► We aggregate information at the NGO × Sector × Year level : DONATION<sub>ist</sub> = 1 if there has been at least one donation from firms in sector s to NGO i until year t.

### Corporate Donations - Version 1

Dependent Variable:				%BADNEWS			
F	(1)	(2)	(3)	(4)	(5)	(6)	(7)
#News	-3.857***	-4.187***	-2.993***	-3.830***	-4.148***	-2.961***	-3.658***
DONATION	(1.112)	(1.164)	(0.750)	(1.089) 3.636 (3.756)	(1.133) 4.274 (3.615)	(0.726) 4.469 (4.782)	(0.851)
NGO FE :	Yes	Yes	Yes	Yes	Yes	Yes	-
Year FE :	Yes	Yes	-	Yes	Yes	-	Yes
Sector FE :	Yes	-	-	Yes	-	-	-
Dimension FE :	Yes	-	-	Yes	-	-	Yes
Sector $\times$ Dimension FE :	-	Yes	-	-	Yes	-	-
Sector $\times$ Dimension $\times$ Year FE :	-	-	Yes	-	-	Yes	-
NGO $\times$ Sector FE :	-	-	-	-	-	-	Yes
Observations	1,698	1,698	1,698	1,698	1,698	1,698	1,698
R-squared	0.553	0.565	0.719	0.553	0.565	0.719	0.664

### Corporate Donations - Version 2

Dependent Variable:	%BadNews			
	(1)	(2)	(3)	
#News	-2.993***	-2.961***	-3.658***	
Donation	(0.750)	(0.726) 4.469 (4.782)	(0.851)	
NGO FE :	Yes	Yes	-	
Year FE :	-	-	Yes	
Dimension FE :	-	-	Yes	
Sector $\times$ Dimension $\times$ Year FE :	Yes	Yes	-	
NGO $\times$ Sector FE :	-	-	Yes	
Observations	1,698	1,698	1,698	
R-squared	0.719	0.719	0.664	

### Conclusion

- Theoretical model of constrained NGOs' communication:
  - Good and bad news generate asymmetric effects.
  - NGOs have incentives to specialize on pure Good Cop / Bad Cop strategies depending on the situation.
  - The Good Cop strategy can have the strongest influence, but it works only if the NGO can send a sufficient amount of news.
  - The theory is robust to a number of extensions.
- Data on news published by NGOs shows that, in a given situation:
  - NGOs polarize (Good Cop or Bad Cop).
  - The share of bad news sent by an NGO negatively correlates with the total number of news disclosed by this NGO.
  - This specialization pattern is not driven by unobservables at the NGO or situation level.

Thank You !

## Appendix

### Theory - Robustness

Back

The theoretical predictions hold when including:

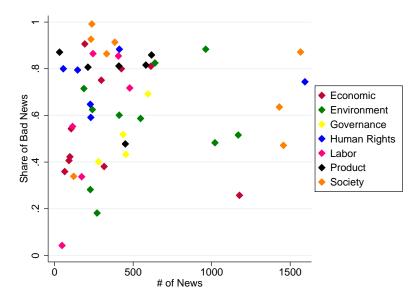
- Continuous quality
- ► Bias between NGOs and stakeholders: ε > 0 Exact same prediction for moderate NGOs (low bias) Almost identical with extremist NGOs (high bias)
- NGOs' information is imperfect (but NGOs are better informed than the stakeholders)
- Noisy signals sent to consumers
- NGOs are endogenously credible when their preferences are (ordinally) aligned with stakeholders' preferences
  In other words, cheap talk works provided NGOs are sufficiently well informed (otherwise not listened too)

Cleaning of the Dataset: Duplicated News & small NGOs

- ▶ 81% of the observations are *unique*, i.e. no news is published by the same NGO on the same [Firm × Criterion] during the whole period.
- Distance between two news on the same [Firm x Criterion]: 500 days (standard deviation: 694 days).
- First, we drop the duplicated news when it occurs within 180 days 7% of the obs.
- 1,287 of the duplicated news are classified as bad, and 541 as good.
- Second, we keep the NGOs when they publish at least 5 news during the whole period. We drop 7.5% of the obs.
- 22,992 observations in the cleaned dataset.

### Heterogeneity across criteria

▶ Back



### Sectors

▶ Back

Sector	# of News	% of Bad News	Top 1 Dimension	# of NGOs	# of Firms
Manufacturing					
Pharmaceutical Products	1974	73.2	Economic	169	25
Refined Petroleum Products	1733	83.61	Environment	155	12
Chemicals	1722	80.43	Environment	166	29
Computer and Electronic Products	1368	43.06	Environment	143	47
Beverages	1251	61.95	Environment	149	15
Food Products	1197	65.66	Environment	139	18
Motor Vehicles	1057	52.6	Environment	145	22
Basic Metals	797	80.05	Environment	105	26
Machinery and Equipment	366	52.46	Society	75	9
Electrical Equipment	221	47.96	Environment	48	7
Other Transport Equipment	164	57.93	Society	41	11
Other Manufacturing	138	55.07	Society	26	9
Tobacco	138	87.68	Society	27	5
Paper and Paper Products	102	58.82	Environment	26	7
Rubber and Plastic Products	75	84	Human Rights	21	6
Wearing Apparel	58	46.55	Governance	15	6
Fabricated Metal Products	17	64.71	Society	7	5
Financial and insurance	2515	59.92	Society	229	107
Mining and quarrying	2355	81.66	Society	200	41
Wholesale and Retail Trade	1665	57.66	Society	180	57
Services	1348	59.87	Environment	181	39
Information and communication	1061	51.74	Society	147	54
Electricity and gas	482	58.71	Environment	81	35
Accommodation and food service act.	429	54.31	Society	97	15
Transportation and storage	219	64.38	Environment	57	22
Construction	40	32.5	Environment	10	9

### Mixed NGOs only

▶ Back

