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Stan Richards School of Advertising & Public Relations
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Energy Institute

Overcoming Public Resistance To Carbon Capture & Storage Technology

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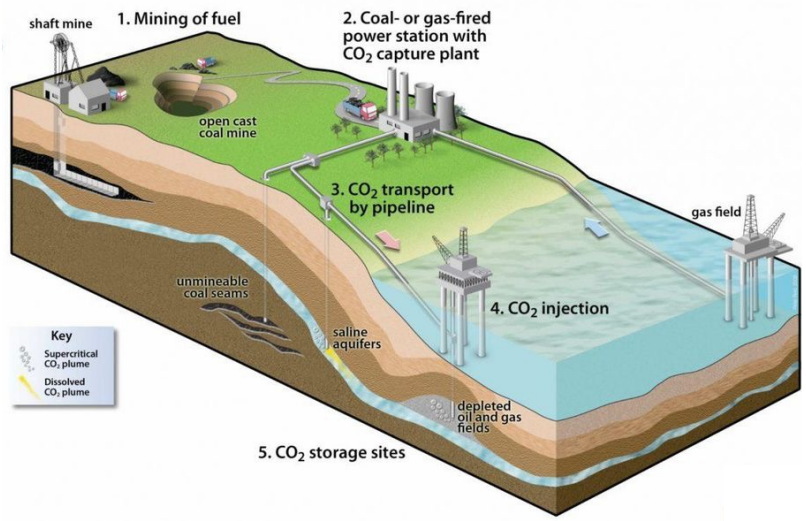
Carbon Capture, Utilization & Storage (CCUS/CCS)

Petra Nova, Houston



CCS & Climate Change

CCS & Stakeholder Opinions

Solutions "rely on my generation sucking hundreds of billions of tons of your CO2 out of the air with technologies that barely exist."

CCS programs are "corporate schemes that place profits over community burdens and benefits."

GREENPEACE

CCS is a "false solution."

"As the risk can currently neither be defined nor quantified, no insurance solutions are available."

Shell

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

"The EPA argues carbon capture has not been "adequately demonstrated" on a commercial scale and is too expensive."

CCS & Stakeholder Opinions


Sen. Gardner, R-CO


Sen. Cramer, R-ND


Sen. Daines, R-MT


Sen. Barrasso, R-WY

"Fund CCUS programs at the highest possible levels in FY 2020 and...adopt an aggressive timeline."

CCS "options are important parts of the solution."

NRDC

LEAGUE OF CONSERVATION VOTERS

EDF ENVIRONMENTAL DEFENSE FUND

SIERRA CLUB

NATIONAL WILDLIFE FEDERATION

Union of Concerned Scientists

AFL-CIO
AMERICA'S UNIONS

"I don't see labor supporting any climate policy that doesn't include support for carbon capture and storage."

Yang2020

Amy for AMERICA

20 PETE 20

BIDEN PRESIDENT

Study 1: Content Analysis


The New York Times

SENATE ACQUITS TRUMP IN CAPITOL RIOT; 7 REPUBLICANS JOIN IN VOTE TO CONVICT


The Washington Post

Trump triumphs

VOTER SCORN FOR STATUS QUO PROPELS UPSET OF CLINTON

He ran with shock and awe. How will he govern?

Victor urges Americans to come together as a nation

Election stunner spurs a plunge in global markets

Trump's hackers kept the faith as skeptics doubted

How Trump broke the old rules of politics — and shook up the world


USA TODAY 01.23.18

Who will get nominated for Academy Awards?

From shutdown to showdown

Despite breaking the logjam on spending, lawmakers will soon wade back into battle

NEWSLINE

Past time for Bonds, Clemens to join Hall

Moon will star in rare triple feature Jan. 31

More Millennials save $100,000 or more

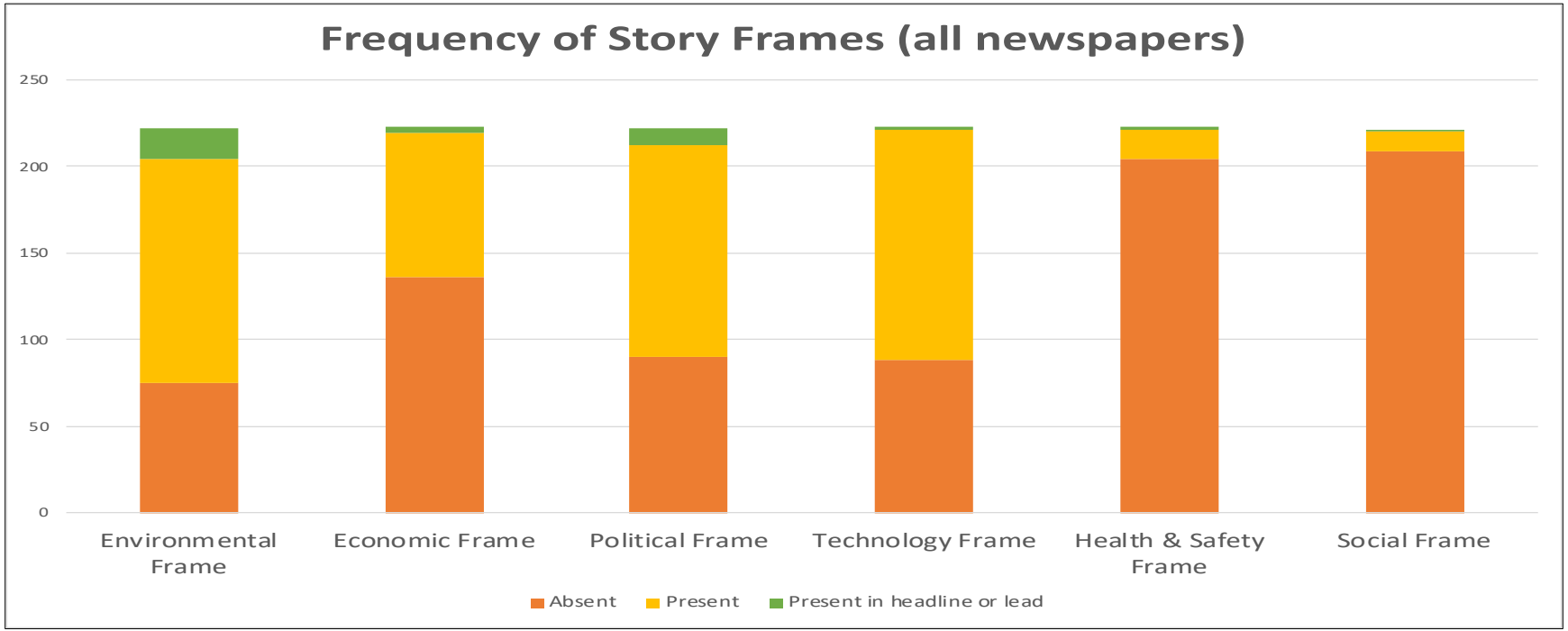
Bitcoin crash would not hurt the economy

Drought leaves Cape Town thirsting

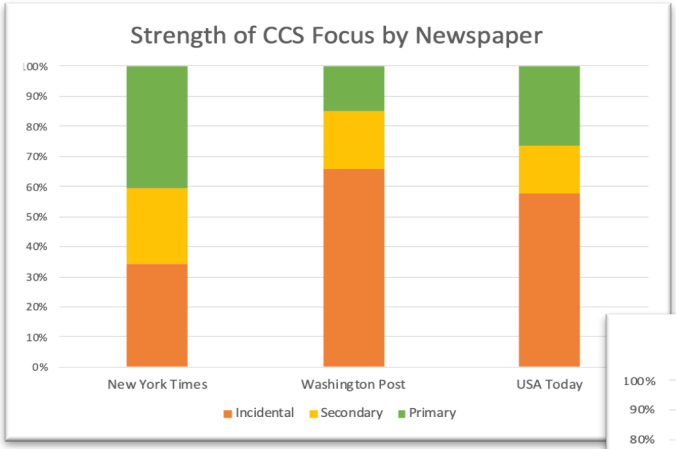
It could become first big city to run out of water

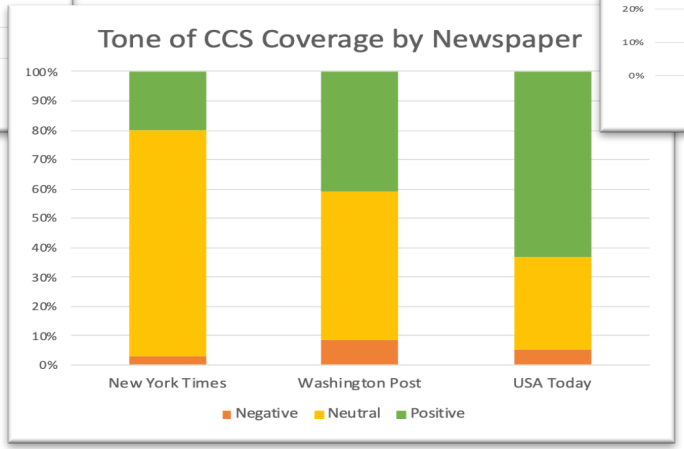
Flu season is wretched, but it's not the worst

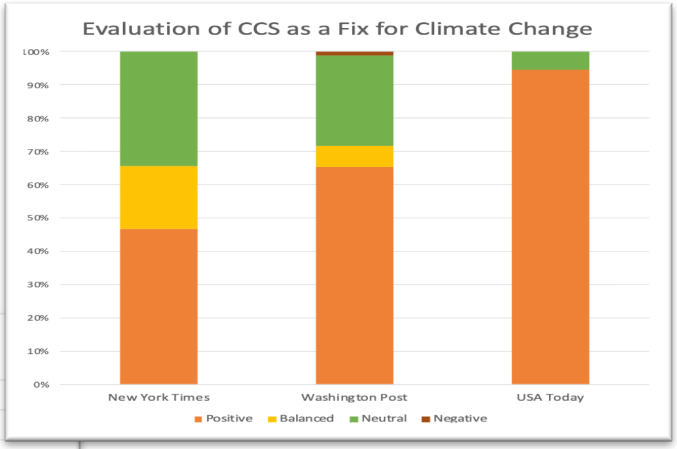
Study 1: Content Analysis



Study 1: Content Analysis







CCS: Risks, Benefits & Emotion

Leakages, impact on marine life, earthquakes, catastrophic release, reinforces status-quo, expensive, general uncertainties

Risks

Removing CO2 from the air, improving air quality, mitigating climate change, job opportunities, energy security

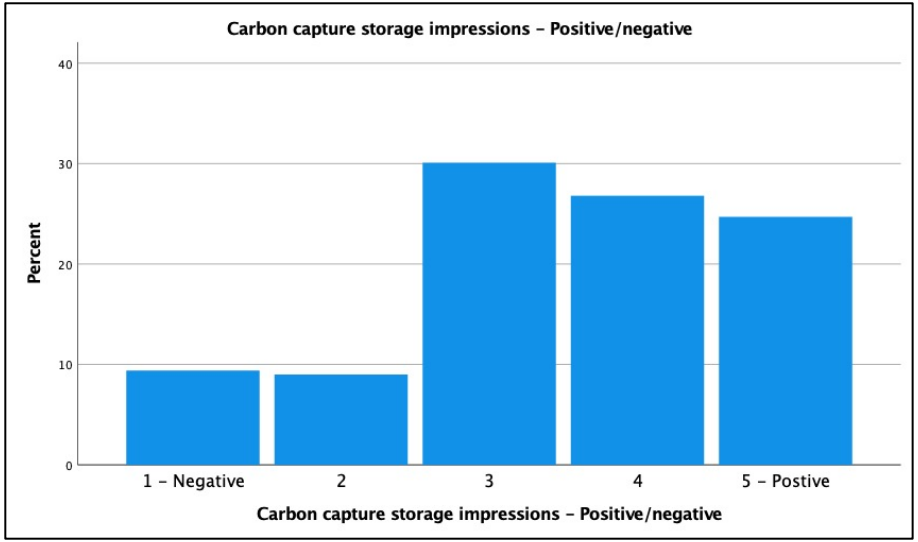
Benefits

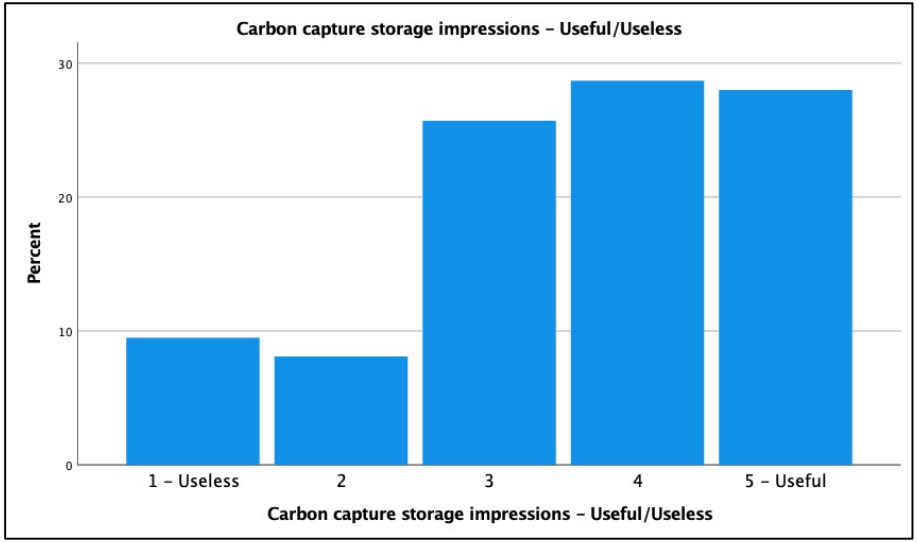
Optimism, excitement, hope, frustration, anxiety, uncertainty, fear

Emotion

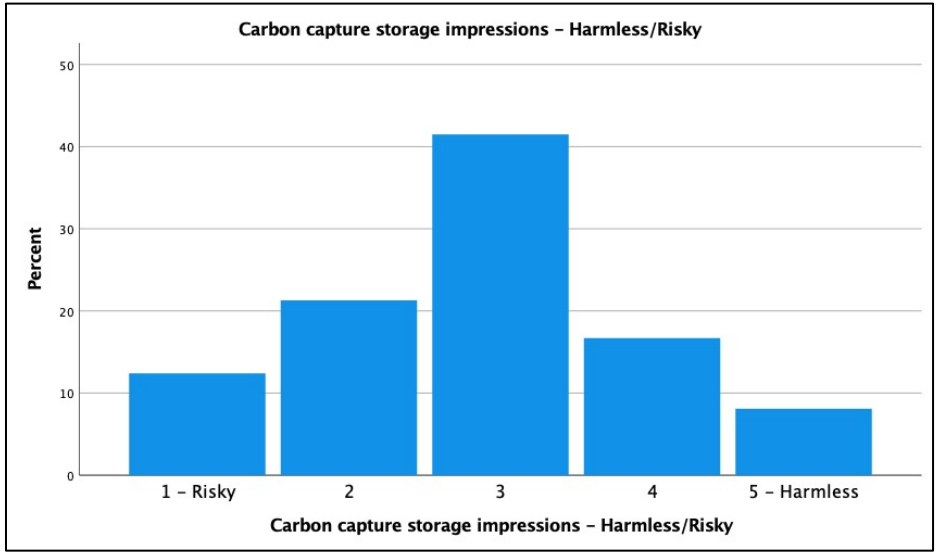
* Focus group data from current DOE-funded study looking at Gulf Coast residents' attitudes toward CCS

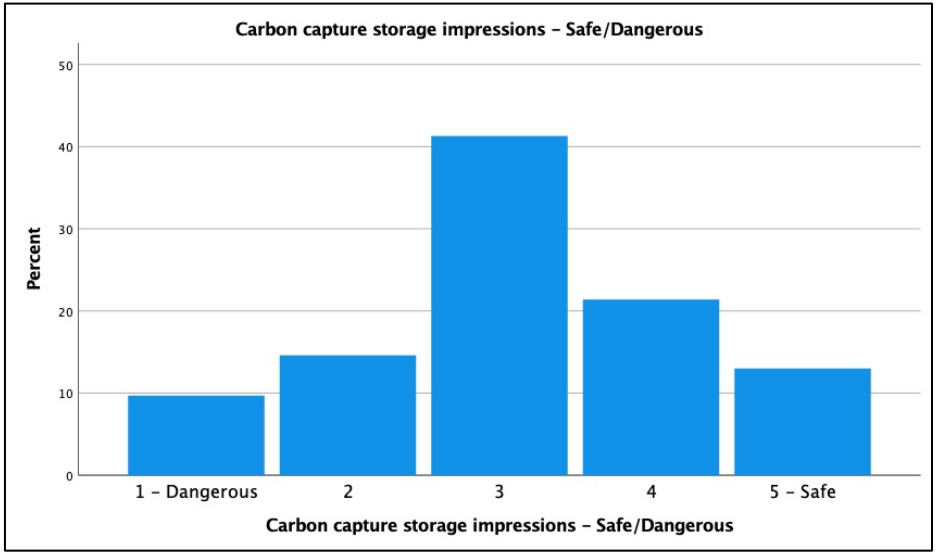
CCS & Public Impressions





CCS & Public Impressions





Study 2: Public Impressions

Six Americas		Standardized Coefficients Beta	t	Sig.
Dismissive, Doubtful, Disengaged	(Constant)		0.466	0.641
	female	-0.078	-1.982	0.049
	white	-0.025	-0.612	0.541
	Education	0.050	1.245	0.214
	polideo	-0.059	-1.426	0.155
	CC Susceptibility	-0.101	-1.810	0.071
	CC Severity	0.121	2.021	0.044
	CCS Response Efficacy	0.510	9.620	0.000
	CCS Self-efficacy	0.330	6.611	0.000

a. Dependent Variable: Carbon capture storage support -- I support CCS

Six Americas		Standardized Coefficients Beta	t	Sig.
Cautious, Concerned	(Constant)		-0.583	0.560
	female	-0.168	-3.460	0.001
	white	0.033	0.627	0.531
	Education	0.029	0.574	0.566
	polideo	0.045	0.804	0.422
	CC Susceptibility	0.013	0.215	0.830
	CC Severity	0.003	0.044	0.965
	CCS Response Efficacy	0.450	8.345	0.000
	CCS Self-efficacy	0.285	5.313	0.000

a. Dependent Variable: Carbon capture storage support -- I support CCS

Six Americas		Standardized Coefficients Beta	t	Sig.
Alarmed	(Constant)		2.040	0.042
	female	-0.107	-3.323	0.001
	white	0.050	1.470	0.142
	Education	0.038	1.105	0.270
	polideo	0.024	0.709	0.479
	CC Susceptibility	-0.019	-0.501	0.616
	CC Severity	-0.091	-2.474	0.014
	CCS Response	0.603	14.294	0.000
	CCS Self-efficacy	0.201	4.682	0.000

a. Dependent Variable: Carbon capture storage support -- I support CCS

Study 3: Message testing

Our Team

PI Lucy Atkinson: message testing, environmental communication, experiments

PI Hilary Olson: sedimentary geology, geological carbon storage, integrating technology & social science

Co-PI LeeAnn Kahlor: information seeking, risk communication, surveys

Co-PI Deena Kemp: persuasion, emotion, behavioral economics, strategic messaging

Co-PI Larry Lake: enhanced oil recovery, geological carbon storage, geostatistics, reservoir engineering