

PROJECT 42 - ENVIRONMENTAL IMPACT ASSESSMENT FOR CARBON CAPTURE AND STORAGE ACTIVITIES IN BRAZIL AND LEGAL ANALYSIS

Coordinators: Professor Dr. Evandro Mateus Moretto; Professor Dr. Hirdan Katarina de Medeiros Costa

Team 1 (Legal Analysis): Prof. Dr. Hirdan Katarina de Medeiros Costa; Dr. Raíssa Musarra; Isabela Morbach.

Team 2 (EIA of CCS): Prof. Dr. Evandro Mateus Moretto; Dr. Drielli Peyerl; Marcia Konrad; Alexandre Simão, Marcia Granzinoli, Fernanda Machado

Institute of Energy and Environment
University of São Paulo, Brazil



Research Centre
for Gas Innovation

cleaner energy for a sustainable future

ENVIRONMENTAL IMPACT ASSESSMENT OF CCS ACTIVITIES IN BRAZIL – PROJECT 42

Team 1 (Legal Analysis):

Prof. Dr. Hirdan Katarina de Medeiros Costa: Coordinator and Advisor

Dr. Raíssa Musarra (Postdoctoral fellow and Coordinator of Environmental License Group)

Isabela Morbach PhD Researcher

Israel Araújo PhD Researcher

Mariana Miranda MSc Researcher

Silvia Cupertino MSc Researcher

Institute of Energy and Environment
University of São Paulo, Brazil



Research Centre
for Gas Innovation

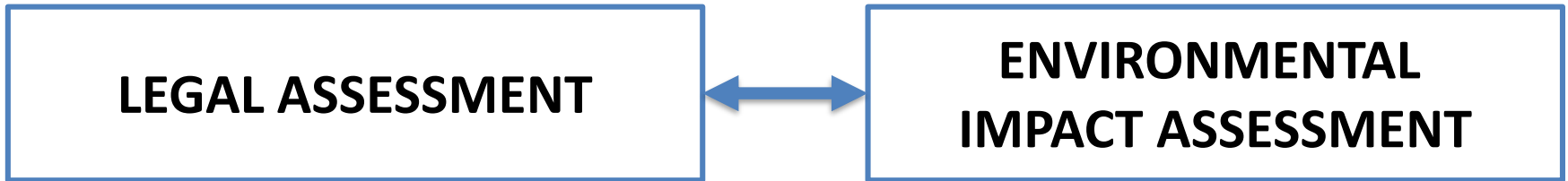
cleaner energy for a sustainable future

**Project 42 - Environmental Impact Assessment for
Carbon Capture and Storage Activities in Brazil and
Legal Analysis**

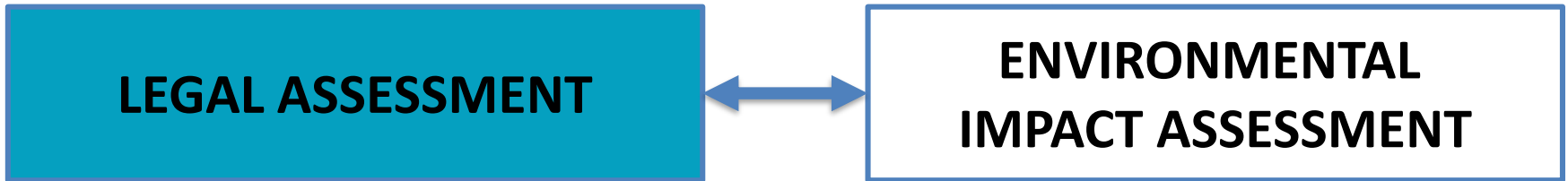
Introduction:

- ❑ Our Project Objective: To propose a Regulatory Framework, and an Environmental Impact Assessment process designed specifically for CCS activities in Brazil.
- ❑ This presentation pretends to describe our activities between April and August, 2018.

Structure:

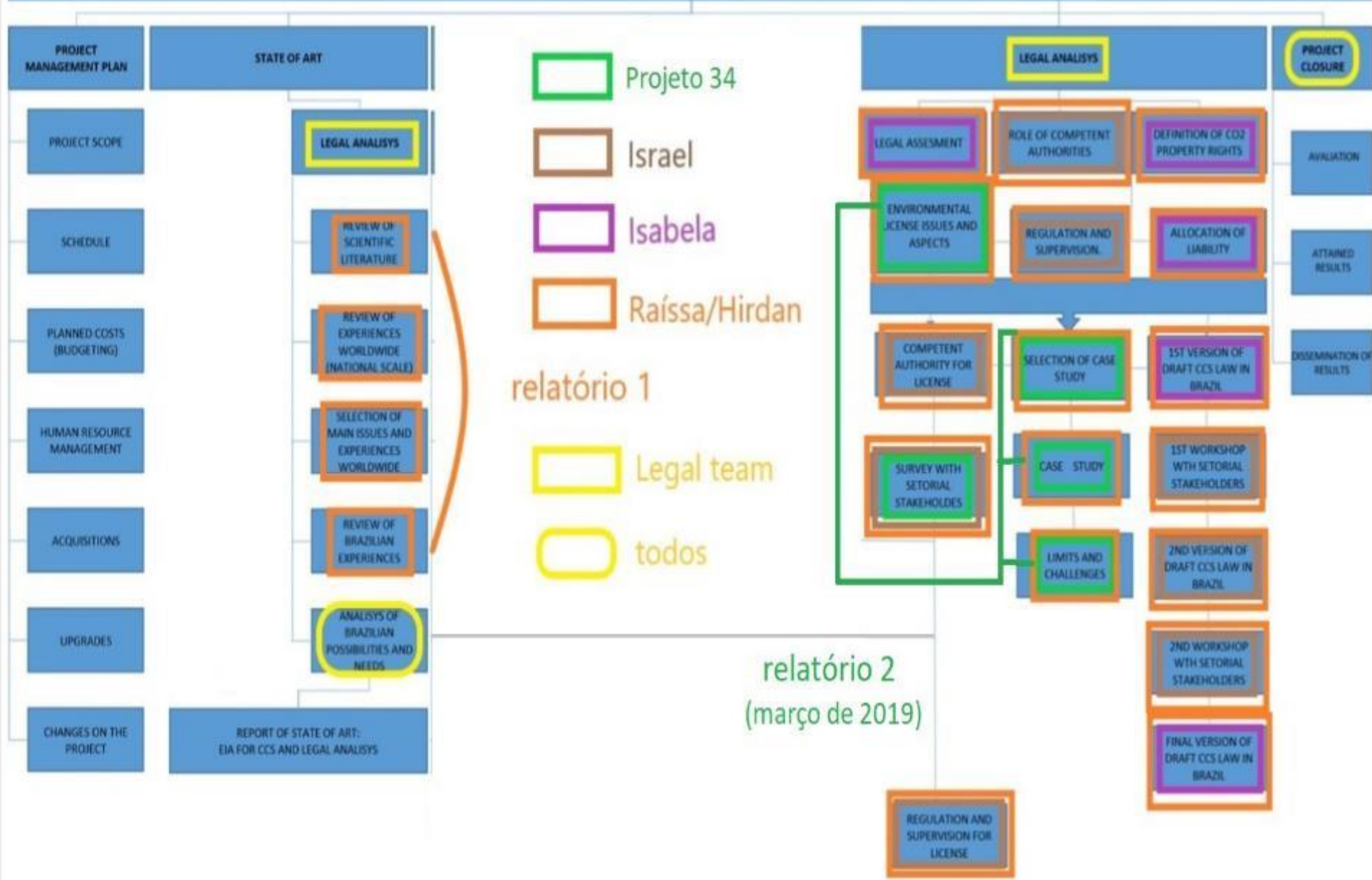


Structure:



Last steps:

- ❑ **Structuring team;**
- ❑ **Literature review:** 1)Role of competent regulatory authority on CCS activities in Brazil; 2)Ownership and CCS activities in Brazil; 3)The main environmental licensing requirements on CCS activities in Brazil; 4)Long-term liability on CCS activities in Brazil.
- ❑ **Presentation our First Report to Shell.**



Agenda:

Prof. Dr. Hirdan Katarina de Medeiros Costa and Prof. Dr. Raíssa Musarra

- ❑ **1) Role of competent regulatory authority on CCS activities in Brazil:** Isabela Morbach; Israel Araújo.
- ❑ **2) Ownership and CCS activities in Brazil:** Isabela Morbach.
- ❑ **3) The main environmental licensing requirements on CCS activities in Brazil:** Israel Araújo; Mariana Miranda.
- ❑ **4) Long-term liability on CCS activities in Brazil:** Israel Araújo; Mariana Miranda; Silvia Cupertino.

Legal Goals:

Working Paper:

ENVIRONMENTAL LICENSE FOR CARBON CAPTURE AND STORAGE (CCS) PROJECTS IN BRAZIL

Interactions to Project 34:

- Memorandum of Environmental License for Project 34;
- Participating in meetings, workshops etc.

Interactions to Project 36:

- Regulatory Framework on shale gas and CCS – Haline Rocha & Prof. Colombo.

Interactions to Project 21 (RCGILex):

Describing sources, principles and Brazilian rules that have correlations with CCS activities.

Journal of Public Administration and Governance

- HOME
- ABOUT
- LOGIN
- REGISTER
- SEARCH
- CURRENT
- ARCHIVES
- ANNOUNCEMENTS
- THESIS ABSTRACTS
- INDEXING
- EDITORIAL BOARD
- GOOGLE SCHOLAR CITATIONS
- CONTACT



Home > Vol 8, No 3 (2018) > Costa

Environmental License for Carbon Capture and Storage (CCS) Projects in Brazil

Hirdan Katarina de Medeiros Costa, Mariana Fernandes Miranda, Raissa Moreira Lima Mendes Musarra, Edmilson Moutinho dos Santos

Abstract

This article presents the environmental licensing system in Brazil and its instrument, the environmental impact assessment (EIA) and its discussion on CCS activities. Globally, extractive industry development projects are well known to have environmental impacts, and Brazil is no exception. Since the adoption of the main Brazilian environmental laws, there has been a general perception that environmental licensing system and EIAs protects its environment. Besides the legal requirement for those tools, this article describes the specific rules on oil and gas projects (onshore and offshore). This research contributes as a review of Brazil's environmental legislation, including the specific oil and gas legislation, presented along with a comprehensive discussion of those tools. Finally, this paper essays a general contribution for an understanding environmental licensing for CCS activities. The research was done using the inductive method, based on the methodology of legal science and with bibliographic and normative research techniques, including institutional analysis.

Full Text:

[PDF](#)

References

Almeida, J. R. L., Rocha, H. V., & Costa, H. K. M. (2017). MOUTINHO dos Santos, E. The Analysis of Civil Liability Regarding CCS: Brazilian Case. In: 6th Latin American Energy Economics Meeting, 2017. Rio De Janeiro. Anais do 6th Latin American Energy Economics Meeting. Rio De Janeiro:

USER

Username

Password

Remember me

ARTICLE TOOLS

[Print this article](#)

[Indexing metadata](#)

[How to cite item](#)

[Supplementary files](#)

[Email this article](#) (Login required)

[Email the author](#) (Login required)

ABOUT THE AUTHORS

Hirdan Katarina de Medeiros Costa
 IEE/ USP - Universidade de São Paulo
 Brazil

Specialist in oil and natural gas lawyer from Federal University of Rio Grande do Norte (UFRN).

ENVIRONMENTAL IMPACT ASSESSMENT OF CCS ACTIVITIES IN BRAZIL – PROJECT 42

Team 2 (EIA of CCS):

Prof. Dr. Evandro Mateus Moretto: Coordinator and Advisor

Dr. Drielli Peyerl: Postdoctoral fellow and Coordinator of Public Perception in CCS Group

Marcia Konrad: Ph.D student (Site selection of CO2 storage)

Talita Granzinoli: Ph.D student (Impact analysis and risk assessment)

Alexandre Simão: Master's Degree student (Environmental monitoring and EIA follow-up)

Fernanda Machado (Public perception)

Institute of Energy and Environment
University of São Paulo, Brazil

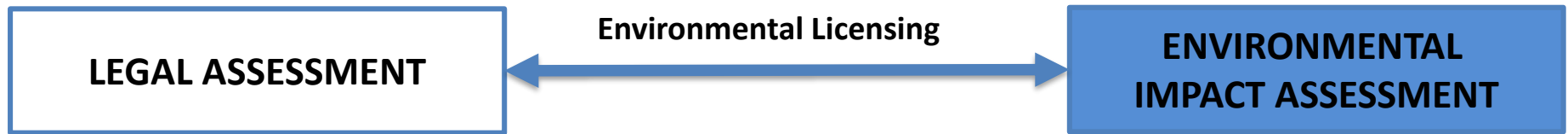


Research Centre
for Gas Innovation

cleaner energy for a sustainable future

**Project 42 - Environmental Impact Assessment for
Carbon Capture and Storage Activities in Brazil and
Legal Analysis**

PROJECT STRUCTURE



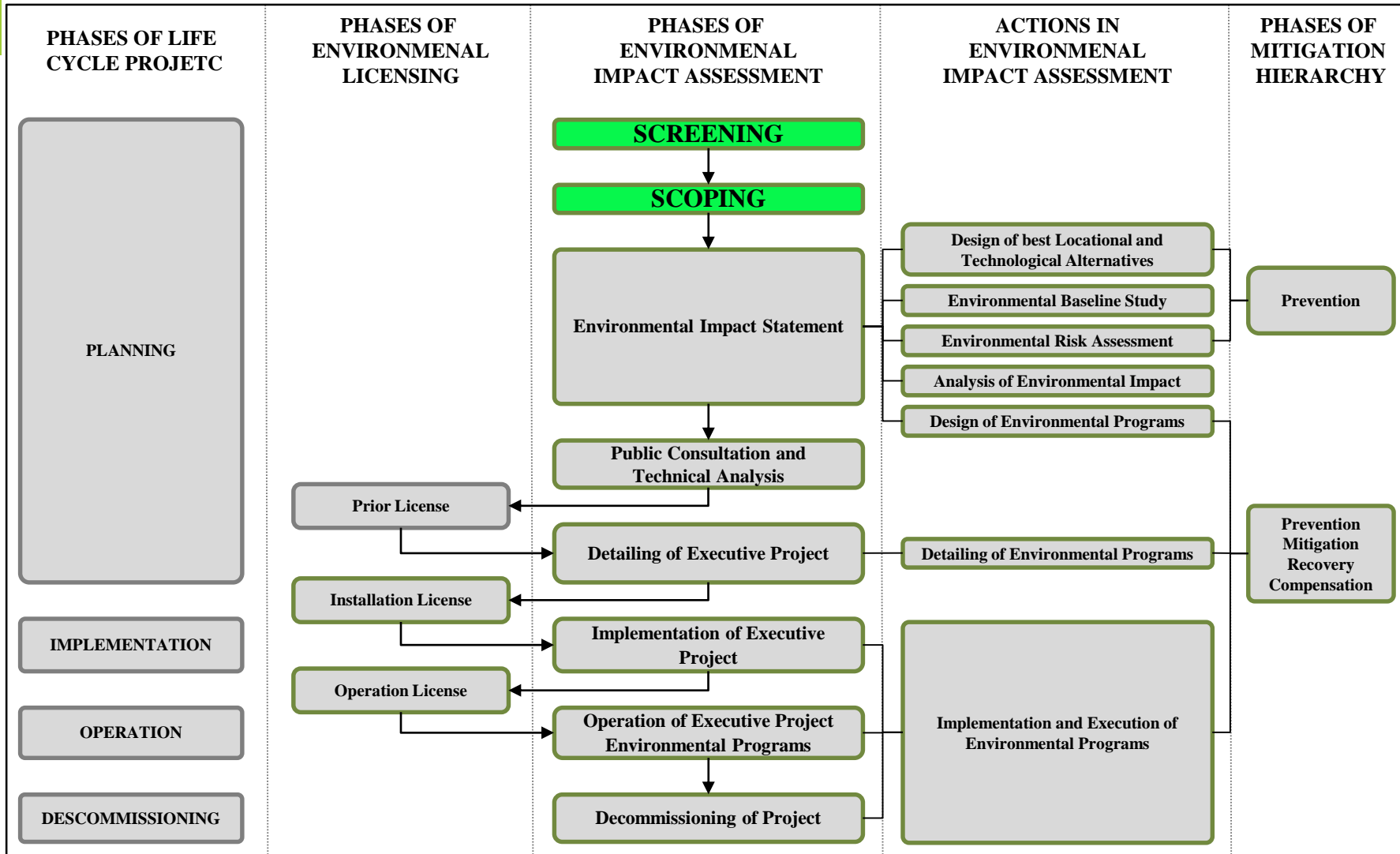
- Problem: There is still no specific EIA protocol for CCS activities in Brazil.
- Trend: The scale-up of CCS activities in Brazil will find technical constraints about Environmental Impact Assessment.
- Goal: Elaborate an Environmental Impact Assessment Framework for the Environmental Licensing of CCS activities.

PREVIOUSLY

Review of scientific and technical literature, experiences worldwide, review of Brazilian experiences, analysis of Brazilian possibilities and needs, and selection of main issues:

- Site selection (~ Project 34)
- Environmental risk assessment (~ Project 34)
- Environmental monitoring (~ Project 34)
- Public perception (~ Project 36, RCGI Group)

CURRENT FRAMEWORK



SCREENING

Main issue: Is CCS Storage (offshore Salt Caverns) potentially or effectively causing Significant Environmental Degradation?

Background: EOR, onshore Salt Caverns Storage etc.

Project Development:

Site Selection (**Marcia Konrad**, Proj. 42+34)

Environmental Risk Analysis (**Talita Granzinoli**, Proj. 42+34)

Environmental Monitoring (**Alexandre Simão**, Proj 42+34)

Public Perception (**Drielli Peyerl** and **Fernanda Machado**, Proj 42+36 + RGCI Group)

Result: Paper about EIA Screening for CCS Storage (Submitted until December 2018)

SCOPING

Main issue: What are the contents required for the EIA for CCS Storage (offshore Salt Caverns)?

Background: Guidelines of EIA for CCS Storage (onshore Salt Caverns), for EOR, etc.

Project Development:

Site Selection (**Marcia Konrad**, Proj. 42+34)

Environmental Risk Analysis (**Talita Granzinoli**, Proj. 42+34)

Environmental Monitoring (**Alexandre Simão**, Proj 42+34)

Public Perception (**Drielli Peyerl** and **Fernanda Machado**, Proj 42+36
+ RGCI Group)

Result: Paper about EIA Scoping for CCS Storage (Submitted until December 2018)



Research Centre
for Gas Innovation

cleaner energy for a sustainable future

THANK YOU



facebook.com/GasInnovation



twitter.com/rcgipage



www.usp.br/rcgi