Chapter 7

Attitude Survey on CDR in Malaysia

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Chapter 7

Attitude Survey on CDR in Malaysia

1. Introduction

As described in Chapter 1 of this report, the IPCC report indicated that global net prize carbon dioxide emissions must reach zero by 2050 in order to keep the temperature increase associated with global warming below 1.5 degrees Celsius. This 'net' is the key point: carbon dioxide removal (CDR) is needed to offset emissions from those parts of the planet where emissions are difficult to achieve.

CDR can be accomplished by a variety of methods, including afforestation, enhanced weathering, ocean fertilisation, and direct air capture. These methods vary widely in terms of carbon sequestration duration, cost, potential, side effects, co-benefits, and many other aspects. In Europe, the concept of responsible innovation has led to ongoing technological development while considering public dialogue and public recognition from the early stages.

The IPCC figures mentioned earlier refer to global emissions as a whole, and the same applies to emerging and developing countries that need to reduce their emissions. Therefore, it is necessary to discuss CDR in ASEAN as well, to understand the public's attitude towards this technology and to develop it in an appropriate direction.

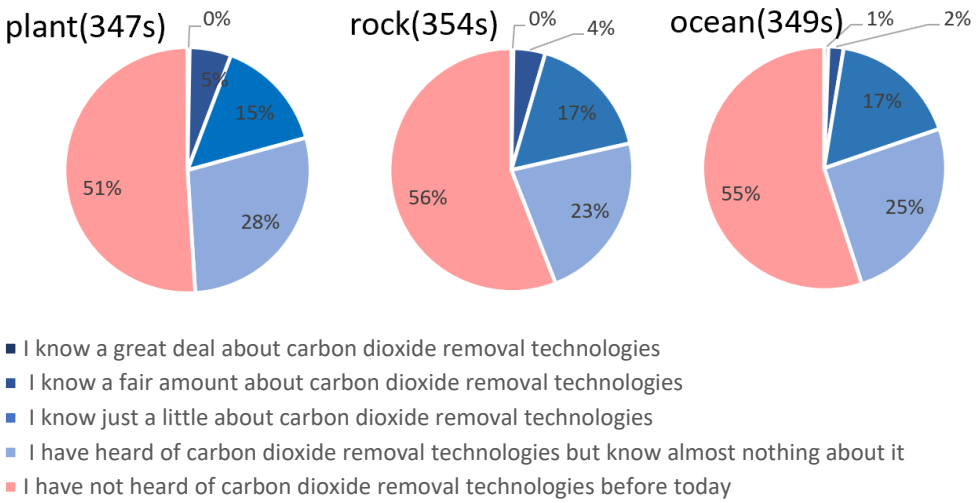
This chapter focuses on the CDR part of the questionnaire survey in Malaysia. The results of the questionnaire strongly depend on the way information is provided. A survey experiment was thus conducted in which three types of information were prepared and participants were randomly divided. The findings in this chapter are expected to serve as a basis for discussions on CDR, which are likely to take off in ASEAN countries in the future.

2. Results

2.1. Knowledge of CDR Technologies

Figure 7.1 shows people's knowledge about CDR technologies. Regardless of the type of technology, more than half the respondents did not know about CDR.

Figure 7.1. Knowledge of CDR Technologies



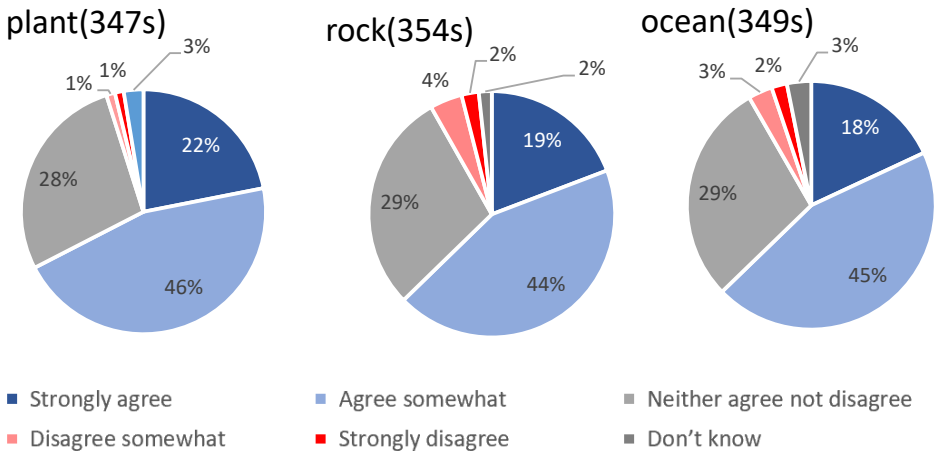
Source: Authors' calculation.

2.2. Attitudes Towards CDR Technologies

Figure 7.2 shows the proportions of respondent evaluations regarding the use of CDR as a way to combat climate change. About 70% of plant respondents selected 'strongly agree' or 'agree somewhat'.

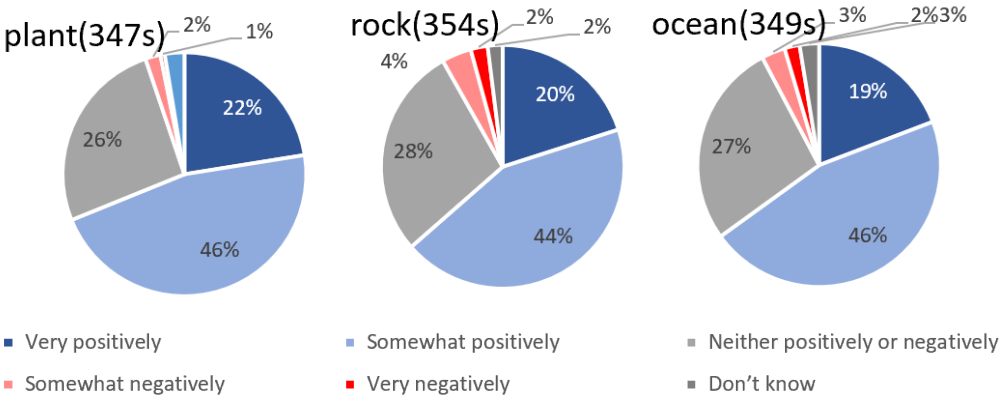
Figure 7.3 shows the proportions of respondent evaluations regarding feelings about CDR. As in the previous question, about 70% of plant respondents selected 'very positively' or 'somewhat positively'.

Figure 7.2. Would You Support or Oppose the Use of CDR as a Way to Tackle Climate Change?



Source: Authors' calculation.

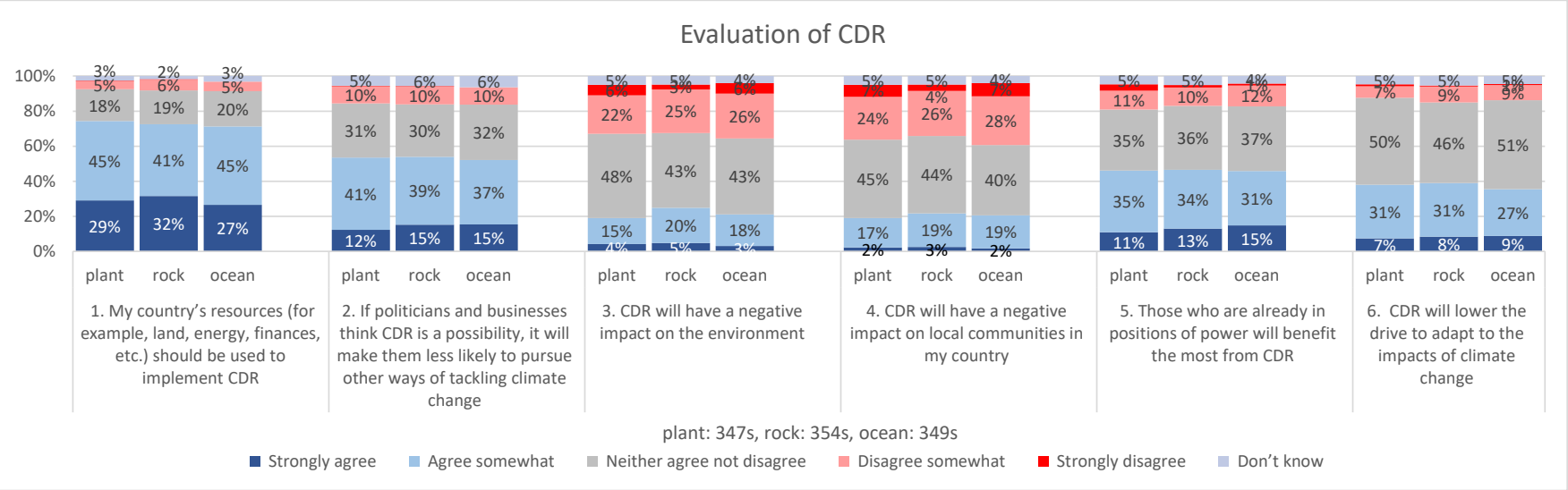
Figure 7.3. How Do You Feel about Carbon Dioxide Removal?



Source: Authors' calculation.

Figure 7.4 shows the attitudes towards the risks and benefits of CDR options. The groups did not differ so much in terms of the level of support.

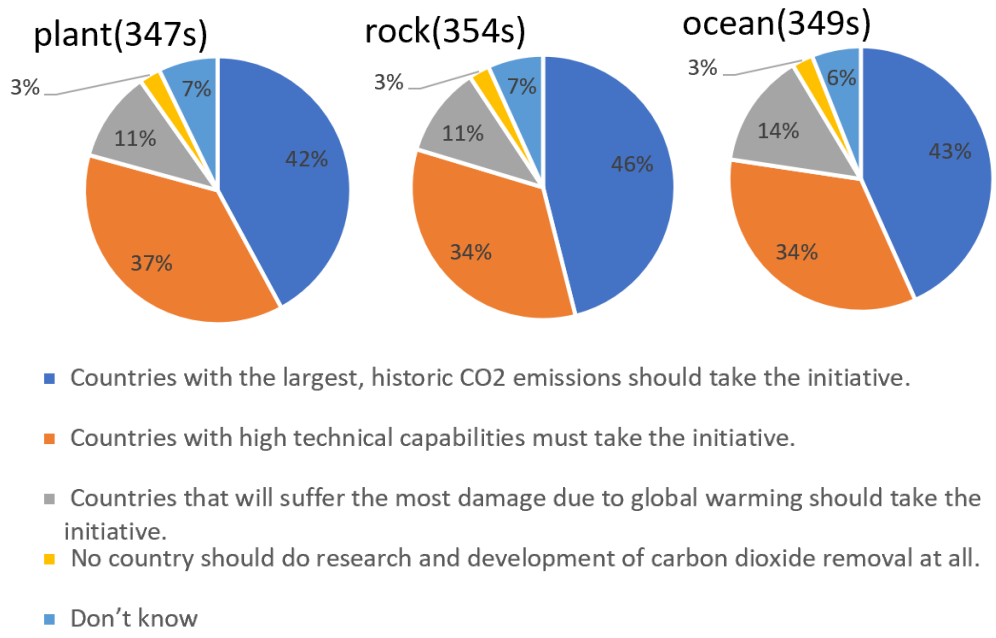
Figure 7.4. To What Extent Do You Agree or Disagree with the Following Statements?



Source: Authors' calculation.

Finally, Figure 7.5 shows attitudes towards the future of CDR research and development. More than 40% of the plant, ocean and rock respondents answered that countries with the largest historic CO_2 emissions should take the initiative. More than 30% of the plant, ocean and rock respondents answered that countries with high technical capabilities must take the initiative.

Figure 7.5. Who Do You Think Should Take the Lead Internationally on Research Into Carbon Dioxide Removal?



Source: Authors' calculation.

The survey experiment on CDR did not yield statistically significant results in a series of Kruskal-Wallis tests.

3. Conclusion

In our survey on CDR in Malaysia, we found that the respondents are largely unaware of CDR, which ranges from tree-planting to chemical engineering absorption to enhanced weathering through spraying crushed rocks. The respondents agreed with possible benefits and risks of CDR, including its ability to 'buy time' for more climate change mitigation and negative side effects on the environment.