# Recycling and reuse of construction and demolition wastes construction essay



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What is waste? In fact, we do not have a definitive list of what is and is not waste. In construction field, the waste can be generated from building a structure (under construction) and those created during the wrecking of a building (demolition debris).

There are many buildings built in whole of the world. At the same time, there are also many building going to be demolished. Hence, the construction and demolition works will bring out a lot of debris waste or waste. Thus, construction and demolition works is the largest contributor of waste in the world.

Recycling and reuse are the essential components of environmentallyresponsible of everyone. Some of the waste can be recycling and reuse and some are not. Recycling is the collection of used materials that would or else be waste to be broken down and reproduce for others purpose. Similarly, reuse is use again the recycling waste in the proper way. In the construction field, suitable method will be applied to recycling the C&D waste and reuse it in others way.

Recently, the environmental impact is the pressing issue in the world. With the improper ways to deal with the waste, it will lead to environment harms. Most of the C&D wastes are recyclable; some of the examples of the recyclable waste are bricks, concrete, timber, asphalt, steel and block. Indeed, most of the C&D wastes are recyclable. Therefore, recycling and reuse of C&D waste is one of the most important aspects in the construction field. If the construction field from all around the world implement the recycling and reuse method to the C&D works, it will minimizing the waste problems and negative impact to the environment concurrently. Hence this is a good practice to minimize the C&D waste with proper method.

## Aim:

To study the reuse and recycling of construction waste in construction and demolition works for Bricks and Concrete.

# **Objectives:**

To identify the two types of construction waste in bricks and concrete.

To determine the ways of recycling and reuse the construction waste.

To determine whether there is any limitation in reuse and recycling the construction waste in Malaysia

# **Problem Statement:**

Building construction is fast moving around the world. The demolition works will bring out a lot of debris or waste. Construction and demolition wastes are one of the largest waste streams in the world. With the improper ways to deal with the waste, it will lead to environment harms. Recycling and reuse of building materials waste is one of the most important aspect in the construction field. I would like to carry out the studies of 2R of C&D waste which are bricks and concrete.

Reuse and recycling of building materials waste is a good practice in construction field. From the research, almost all the job site wastes are

recyclable. This research will come out the positive and negative outcome of recycling and reuse of C&D waste. Indeed, 2R of building materials waste will save the costs than to throw them away. In my research, I will try to explore is there any limitations or improvements for the reuse and recycling practice in Malaysia. This is because compare to others country, Malaysia is still improving in this aspect in the construction field.

# **Scope of Study:**

What is covered in my study:

What are the construction waste which can reuse and recycling in construction field?

Positive and negative outcomes of 2R of construction waste.

How the construction waste recycling and reuse.

Any limitation and improvement of 2R of C&D waste.

# Methodology:

# **Stage 1: Initial Proposal**

## **Stage 2: Literature Review**

A comprehensive of review of the relevant literature including a computerassisted search will be undertaken in order to develop an understanding of two types of the construction waste which can be recycling and reuse. The Literature Review will be followed by a questionnaire with the relevant people.

# **Stage 3: Questionnaires**

This stage will be implemented by carry out the questionnaire to the relevant people such as manufacturer or contractor in the construction industry. Besides, information from internet search, newspaper, journals and magazine will also be part of my data collection.

# Stage 4: Writing up

This stage involves writing up the content of the dissertation should cover the chapters proposed in the following section:

Chapter 1 – Introduction

Chapter 2- Literature Review

Identifying two types of the construction waste for bricks and concrete.

The ways of reuse and recycling of the construction waste

Determine whether there is any limitations in reuse and recycling of construction waste in Malaysia.

Chapter 3 – Case Study

Chapter 4 - Data analysis

Chapter 5 - Conclusion and Recommendations

## References

Some of the example of questionnaires:

Which types of materials would you think that is highly produced in the Construction and demolition works?

Steel b) Timber c) Bricks d) Concrete

Do you think that there is any limitation or improvement of reuse and recycling of C&D waste in Malaysia?

Cost b) Techniques c) Lack of professional workforce/experience

Do you think that 2R of C&D waste important?

What are the factors that you think that 2R of C&D waste important?

Environmental issues

Save cost

Government pressure

# **Project Plan and Schedule:**

Task to be completed

Month

11

12

1

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Initial Proposal

Introduction

Literature Review

Chapter 1: Types of waste

Chapter 2: ways of 2R

#### Chapter 3: improvement/limitation

Research Methodology

#### Interview

Data analysis

Conclusion and recommendation

**Overall References**