

# Making Improvements For Sustainable Infrastructure

Infrastructure sustainability is a topic that many building designers and stakeholders have been researching heavily in recent years. It is important to understand sustainability and find new ways of enhancing infrastructure to keep people safe and preserve its longevity.

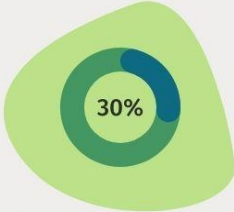
## What is Sustainable Infrastructure?

It is considered an effort to meet the requirements of the present without compromising the needs of future generations. Sustainable infrastructure is a constant developing endeavor due to exploitation of resources, investments, developing technology, and institutional changes



## What is the Problem?

With global warming, habitat destruction, poverty and other socio-environmental issues becoming more evident, it is clear that investing into sustainable practices is needed. Since the spark of industrialization, there have been rapid advancements in technology which has led to an accelerated pace of development beyond what the earth's natural resources can handle.



## High Strength Materials Cause a 30% Reduction in Carbon Emissions

These building components can cut energy expenditure and limit our carbon footprint



## CTBUH Determines Steel as Leading Sustainable Materials

A study done by the CTBUH concluded that steel's intrinsic value of recyclability is highly valued for making decisions on environmental properties of infrastructure

## What are Ways of Improving Sustainability?

Architects and architectural engineers are now designing buildings that are not only functional and productive, but also regenerative by design using techniques of biomimetics. Improving sustainability begins with analyzing effective materials that can enhance the environment and longevity of the structure.



## Why Materials are Used for Sustainability?

Materials such as steel, concrete, and stone as well as organic materials can better improve sustainability depending on location of the environment and purpose of design.

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### Making Improvements for Sustainable Infrastructure

**Analysis:** My remix was an infographic based on my topic of sustainable infrastructure. The implementation of an infographic makes the most sense for my research because my previous research essay was informative and my infographic reflects the statistics and data I collected. The infographic also contains summarized information about my topic. I believe this infographic was an overview of everything that I have learned during my research phase. I decided to organize my remix by having separate sections with headers being questions and subsections answering the questions. I determined that the most important questions to add to my infographic were what is sustainable infrastructure? What is the problem? What are ways of improving sustainability? And what materials are used for sustainability? I feel as though these questions encapsulated the general information I collected in my research essay. Titles of my paragraphs are important because they are what attracts my audience to read more in depth about the topic being presented. I included a basic title but bolded the words “Sustainable Infrastructure” to catch the attention of my audience. I also added a subheading giving a general overview and importance of my topic. I believe an important element of infographics is design and graphics.

For my infographic, I decided to use a green and blue theme because these colors reflect the environment and sustainability. I think these colors go well together and attract people passing by. I used a consistent font that was easy to read and understand. I like the idea of using a consistent color palette and having graphics in that same color scheme. Each graphic reflects the details in each subcategory. For example, I used question marks for the “what is the problem?”

section and I used a progress ring for statistics on the reduction of carbon emissions. I kept the background simple but added a little detail to maintain the theme.

Before creating my infographic, I was determining whether or not to add bullet points of information or small paragraphs. I decided it was best to add small paragraphs because I wanted to add information in a sophisticated way. My intended purpose for the infographic was to place physical copies on posts and building exteriors in big cities. The lack of sustainability is most prominent in larger cities. They are also the most populated areas, meaning that the infographics would attract a large number of audience members. In my infographic, I used a specific statistic collected about a 30% reduction in carbon emissions using high strength materials and another data point about steel being the leading material in sustainable infrastructure. The first point shows how impactful sustainability is for the environment using raw data. Numbers in infographics are important to give evidence to claims being made. Including steel as the leading sustainable material shows the importance of steel in the industry. Most quick facts like these are what audiences remember the most after looking at an infographic. I am satisfied with the complete and final infographic. I believe it really does a good job at notifying my audience of the important points made in my research essay.