

Toolbox resource

How to use the Energy Wheel





S.T.C.K.Y Play the Energy Wheel video

The Energy Wheel – a simple way of identifying and responding to hazards on site.

Why is this important?

Building and construction sites are hazardous environments and every year around the world many people are injured on them, some very badly. It's the same in New Zealand with construction harm statistics leading all other industries.

Research has shown that one of the main reasons why there are so many accidents and injuries is that we aren't as good as we think we are at identifying the hazards on site. And if we don't identify them, then we don't respond to them!

Research has shown that typically we only identify 45% of the hazards on site at any given time!

Why Energy?

Harm can be defined as the result of some form of energy acting on the human body beyond the body's ability to safely absorb that energy. Think about the sun for example, without its energy no life can exist on earth but if we absorb too much sunlight then we may be at risk of melanoma. Or gravity – there is a limit to how far we can fall beyond which we suffer bruising, internal injury or broken bones.

What is the Energy Wheel?

The Energy Wheel is a simple tool that we can use when talking about hazards on site that has the potential to dramatically increase their identification.

It is estimated that up to 30% more hazards have been identified by those using it.

The Energy Wheel is a simple diagram that shows ten different types of energy. Each type of energy can be associated with many of the different hazards found on a building site. It makes hazard identification easier and more accurate so that those supervising and working on site can come up with better ways of dealing with the hazard.

What help is available?

CHASNZ has free resources available to support you and we are always looking for good ideas on how else the energy wheel could be used.

We have different sized stickers available to be placed on your site hazard board or even on safety helmets.

We have a toolbox talk guide and more detailed lists of energy hazards that exist on building sites.

We have a fold up pocket guide available that shows the ten types of energy with some simple hazard prompts. You can download the pocket guide and put your own branding on it – or arrange for CHASNZ to print some for you.



We have a simple video that explains the overall concept of the energy wheel and we are looking to build more content that shows it being used on site. We are always keen to get videos and examples from the field to share with the rest of the sector.

If you want a deeper understanding of the science behind the energy wheel then download this paper.

Lastly, we are more than happy to support building companies by being on site with you and explaining the energy wheel. You are free to use and adapt any of the tools, guidance or resources to suit your own business. Get in touch at info@chasnz.org.



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How to use the Energy Wheel?

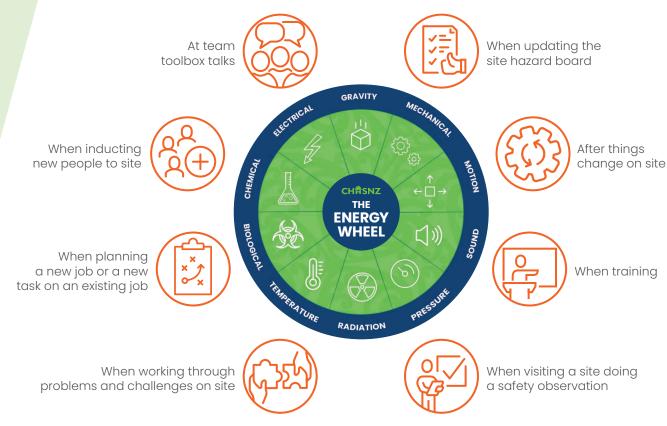
The Energy Wheel does not need to replace any of your existing health and safety or operational practices and can be used at any time when you are thinking about hazards on site. The easiest way to use the energy wheel is to:

- Run through the ten types of energy with your team, or individually, and see what hazards can be identified that fit into each type.
- 2 Ask yourselves whether the hazard is serious enough to cause significant harm we use the acronym **STCKY** which stands for Stuff That Can Kill You.
- 3 For any **STCKY** hazards you need to think carefully about what needs to be in place to make sure that the hazard is always controlled. Don't depend on controls that need a human's attention to work as this isn't reliable.

Who should use it?

This tool is designed for everyone to use. You don't have to be a health and safety rep or manager. Site supervisors, lead builders or others in charge on site find it a useful way to talk to the rest of the team, however there is no reason why anyone on site can't use it.

When to use it? You can use it anytime but typically it is used:







About CHASNZ.

Construction Health and Safety New Zealand (CHASNZ) is a registered charitable trust dedicated to supporting the building and construction sector in delivering productive, healthy and safe worksites. https://chasnz.org/meet-the-team/