Futuristic wall display shows real-time energy usage

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(PhysOrg.com) -- There's more to the home energy conservation system designed by Queensland University of Technology industrial design graduate Erica Pozzey than meets the eye.

Her design, Triad Energy, won two industry awards which brought work experience with Infinity Design and Prodex and helped Erica gain a valuable understanding of real-world industry practice.

Triad Energy is a concept for a management system that lets people not only customise the unit to their home's own characteristics it also

generates awareness and understanding of why energy conservation is relevant on a personal level, with clear, tangible benefits within their own environment.

"Triad Energy turns energy usage into captivating infographics on a wall-mounted display so that you can see at a glance how much energy you are using, how close you are to the target you have set yourself and how it compares with other similar size households nearby," said Ms Pozzey, who is now studying for a Masters of Applied Science (Research) at QUT.

"The wall display is accompanied by a web platform so that you can send and receive from the Triad Wall and view a detailed history of your usage and gain information of others'.

"Triad Energy can also send alerts to your mobile when you are nearing your target range which gives you the ability to further coordinate your energy use without changing established routines."

Ms Pozzey said her design was sparked by the realisation that people needed something they could engage with to help shift awareness of the need to reduce energy use into actually doing so.

She said Triad Energy drew upon persuasive design principles for integrating new objects and systems into everyday life and human behaviour.

"For a new design to be accepted it should encourage self-monitoring as this allows users to track their own progress, enjoy achieving their targets and progressively guide themselves to change their actions towards the desired goal," she said.

"The capacity to compare and share your usage with surrounding homes

or suburbs draws upon the idea of 'surveillance'. When people can observe others they form judgments on how they are faring in comparison which may prompt them to compete with or at least match their neighbours.

"It also has the effect of influencing action because ultimately people behave differently when they know they are being observed.

"If we can find solutions to challenges such as energy conservation that are mindful of consumers' constraints such as deadlines, responsibilities and expectations we can provide tools to steadily integrate behavioural change into established routine."

Ms Pozzey received the Industrial Design Excellence award from Infinity Design and also the Product Development Excellence award from Prodex, design consultancy firms based in Brisbane.

More information: dialogue.media-culture.org.au/ … tudents/erica-pozzey

Provided by Queensland University of Technology