

Case Study 3: Tesla electric car.

(Case study developed from thoughts by William Marcy, Executive director of the Murdough Center for Engineering Professionalism/National Institute for Engineering Ethics, Texas Tech University.)

William Marcy says: "It's very interesting because you would think about the responsibility engineers have with regard to the safety of the car (the Tesla electric car)—but what about the batteries? Someday that car will go to a landfill and what does that battery in a landfill mean for the environment? If you think of the life cycle of the product, does the company have a responsibility to properly dispose of the car—should that be part of the offering to a customer when they buy? After all, it may not be a factor for more than a decade."

Case Study 4: Fastening attachment.

(Case study developed from thoughts by William Marcy, Executive director of the Murdough Center for Engineering Professionalism/National Institute for Engineering Ethics, Texas Tech University.)

William Marcy: "Let's say you project into the future and think about what might happen for instance if an outside inspector reports that a certain fastening attachment isn't at the level of quality required. Who is responsible for rectifying that issue? Should the company who did it in 2005 be responsible even though the standards might have been different then? If you put something in that no longer is up to code and you now know that, is your company obligated to say something even if no outside inspector raises the issue? Making an ethical decision is thinking about the lifecycle of a project or product or design, not just assuming everything is fine. What may be OK in 2005 may not be fine in 2016 because technology, policies, and design methods can all change."

For Reflection:

'Making an ethical decision is thinking about the lifecycle of a project or product or design, not just assuming everything is fine.'

1. If this is right, what does this mean for engineering practice in general and you're your practice personally?
2. Does 'thinking about the life cycle of a product' mean that you need to commit to thinking about more than what is required by current codes, standards, or regulations? If so, what should you commit to thinking about?