

**Understanding Design**  
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**Module - 04**  
**Start of Section 5**  
**Lecture – 22**  
**Understanding embodied energy**

So, if you had to think of a chair and how it could be used when you had to dispose of it, what kind of design thinking skills would you deploy? Actually another exercise he does is to look at how to inculcate the concept of value into what you design. The example he shared with me was that your cat sits on a chair a lot right, this chair that you have designed with all your...

User studies.

User study, you know, aesthetic sense and your cat sits on it and loves it. So, or somebody you loved a lot died on the chair right. So, the value of the chair increases for you. Imagine how a chair would increase in value for your customer. So, if, as a student you are designing a chair try to conceive of these ways in which a chair could become valuable.

So, its life is extended, kind of.

ya, and then design the chair. So, you know you need to embed a timeframe in your design and this is something you have to suggest in your design for the product.

Anybody else you can think of?

Ok at Shristi we have something called the frugal design lab that is run by Sudipto Das Gupta and his wife Nandini Das Gupta and actually Sudipto spoke to me about the idea of embodied energy or embedded energy.

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For example if you buy a cane chair right and you think you know you are really happy because you think you're buying this biodegradable product that is you know good for the environment, I mean you are happy about it. But he says you cannot just think about, you know, about products in that fashion, you have to think of the, you have to calculate the embodied energy within that chair and that means, calculating what it took for the chair to come to you from where it was produced and manufactured. How many, you know, what was its carbon footprint, how many miles it is travel etcetera etcetera and that actually is the cost of the chair embodied within it.