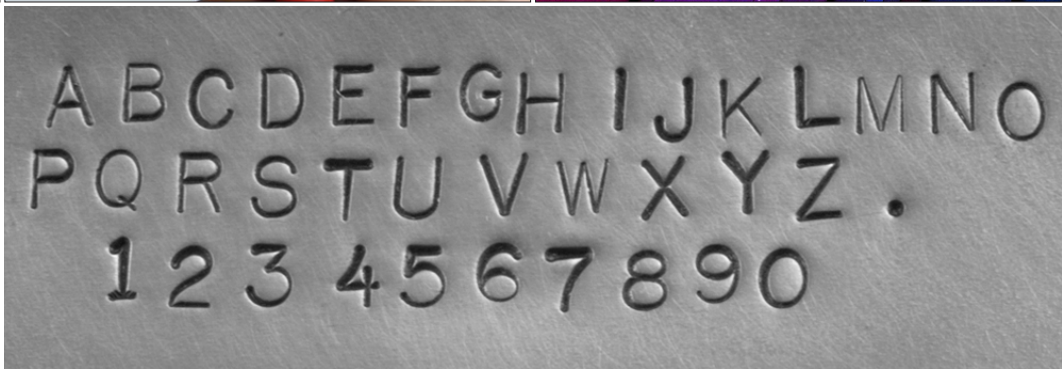
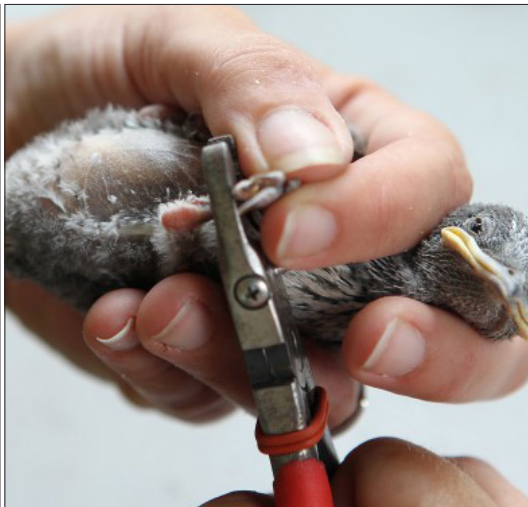


HOW DO WE TEACH WHAT IS GOOD AND BAD IN TERMS OF ECOLOGY OR ECONOMY, AND DO IT IN A WAY THAT HELPS US TREAT OUR ENVIRONMENT BETTER?

FROM SMALLER INSTITUTION TO INDIVIDUAL CITIZENS

FROM A SOCIETY TO THE CITIZENS

FROM WWF TO FASION INDUSTRIES



## Plywood

Cradle-to-gate LCA Results (per declared unit)

Acidification Potential 2.92E-3 kg SO <sub>2</sub> eq	Eutrophication Potential 1.37E-4 kg N eq	Global Warming Potential -1.53E+0 kg CO <sub>2</sub> eq	Ozone Depletion Potential 1.56E-10 kg CFC-11 eq	Smog Formation Potential 4.49E-2 kg O <sub>3</sub> eq	Primary Energy Demand 1.81E+1 MJ
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QUARTZ DATABASE

### Communication through surfaces of objects, a graduation ring

Most manmade objects do not communicate their environmental impact. It is hard to understand what they demand of our planet. To label an object with a suitable piece of information might help us understand the background of the material of which it is made.

Then, it is important to choose an object which effectively carries messages, and to the right receiver. What the skin is to a tattoo a label can be for the surface material of any object.

**PED**  
Primary Energy demand. Energy sourced from earth in production.

1,81E+1 MJ

33,52H /kg  
150W

**Plywood** 33,52H /kg  
150W

THE ENERGY DEMAND TO CREATE 1kg OF PLYWOOD IS EQUAL TO RIDING A BICYCLE AT 150 WATTS FOR 33.52 HOURS.  
WHAT IS THE ENERGY DEMAND FOR OTHER MATERIALS?

According to a AT-mineral processing it takes about 5,2GJ of energy in the mining and refining process of one ounce of gold. According to the quartz project database, the energy it takes to source one kilogram of construction plywood is 1,81E1 MJ.

### Borrowing from future generations

Imagine yourself riding a bicycle. You can comfortably produce 150W of power for some time. To reach the energy needed to source one gram of gold from earth you must ride your bike day and night for two weeks.

Imagine yourself the time you spend studying in Lund. Five years of commuting to school with a bicycle and occasionally riding on the weekends. Let us say you spend ten minutes a day riding your bike. During your entire education you would have almost earned yourself one gram of gold.

Imagine yourself continuing to commute using your bicycle as your main means of transport. You work your 35 years in your field of expertise trying to improve our relation to earth. About the time you retire you will have earned yourself an 18k gold ring of 9,6 grams from the energy you produced commuting throughout your education and working life as well as all the days you were off work.

If the same size and shape of ring were made of wood, it

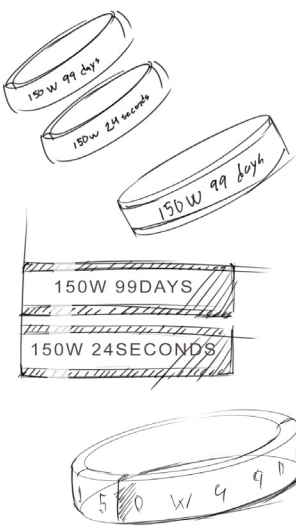
**Gold** 340H /g  
150W

150W 99D

150W 24s

would take you only 24 seconds.

I designed a graduation ring which intends to help graduates choose their materials wisely in the future. It will show the true energy costs of our daily choices and our relationship to earth. Somehow, we borrow resources and take loans in terms of materials and energy from our future selves and the generations to come.



1 5 0 W 2 4 S E C O N D S  
1 5 0 W 9 9 D A Y S  
1 5 0 W 2 4 S E C O N D S  
1 5 0 W 9 9 D A Y S  
1 5 0 W 2 4 S E C O N D S  
1 5 0 W 9 9 D A Y S  
1 5 0 W 2 4 S E C O N D S  
1 5 0 W 9 9 D A Y S





LUNDS UNIVERSITET



## MATERIALS COME WITH A RESPONSIBILITY

IMAGINE YOURSELF COMMUTING 10 MINUTES/DAY USING A BICYCLE. YOU WORK 35 YEARS IN YOUR FIELD OF EXPERTISE. ABOUT THE TIME YOU RETIRE YOU WILL HAVE EARNED YOURSELF AN 18K GOLD RING OF 9,6 GRAMS FROM THE ENERGY YOU PRODUCED COMMUTING THROUGHOUT YOUR EDUCATION AND WORKING LIFE AS WELL AS ALL THE DAYS YOU WERE OFF. IF THE SAME SIZE AND SHAPE OF RING WERE TO BE MADE OF WOOD THE TIME WOULD BE REDUCED TO 24 SECONDS.