

# Closing Loops for Mobile Phones

## HVM class 08 CLASS

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Nokia



# Presentation Outline

Nokia is the world leader in mobility, driving the transformation and growth of the converging Internet and communications industries.

We make a wide range of mobile devices with services and software that enable people to experience music, navigation, video, television, imaging, games, business mobility and more.

Developing and growing our offering of consumer Internet services, as well as our enterprise solutions and software, is a key area of focus. We also provide equipment, solutions and services for communications networks through Nokia Siemens Networks.

- Commitment to Sustainability
- Life Cycle Thinking
- Sustainable Products and solutions
- Recycling
- Example

# Nokia in environmental sustainability

## *Vision:*

- A world where **everyone** being connected **contributes** to sustainable development

## *Targets*

- Make sustainability part of everything we do
- Provide products and services enabling sustainable choices
- Leverage environmental features as a driver for innovations
- Use the “power of us” to make a difference

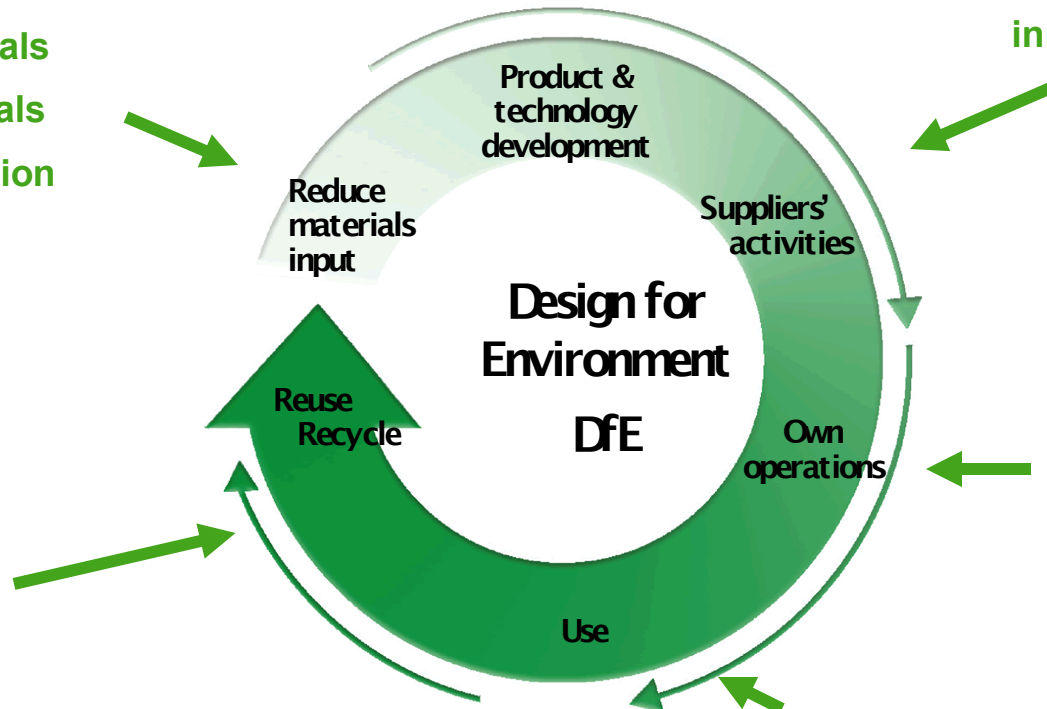
# Nokia in environmental sustainability

- ***Demonstrate leadership:*** by shaping industry environmental performance with thought leadership and driving best practices
- ***Influence consumer behavior change*** through eco-innovations and engaging solutions
- ***Substantiate Nokia messages*** by ensuring consistency and providing proof points of our commitment to sustainability
- ***Drive company behavior change*** by aiming at a positive contribution and minimizing Nokia's ecological footprint

# *Demonstrate Leadership* - Life Cycle Thinking

- Origin of the materials
- Hazardous materials
- Amount of materials
- Energy consumption
- Recyclability

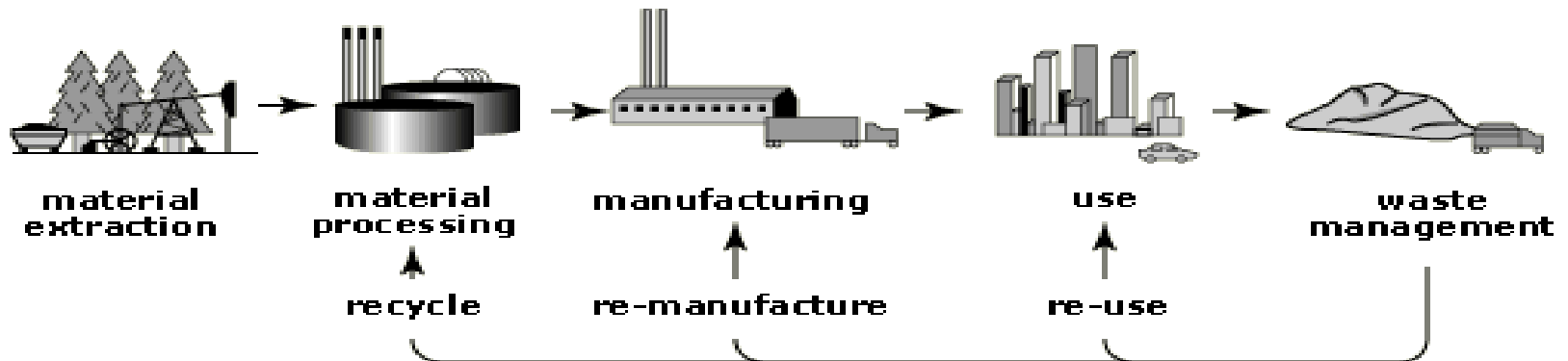
- Nokia's responsibility in the value chain



- Good housekeeping
- Energy
- Waste

- Take back
- Recycling

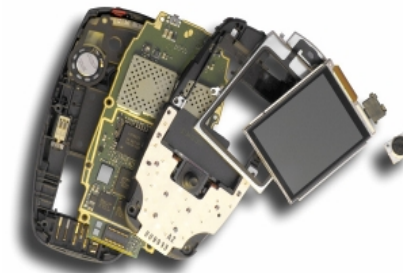
- Guidance for environmentally sound use



## - sustainable Products

- service applications advocating green choices

- sustainable practices by Way of Working



# Introducing the Nokia 3110 Evolve

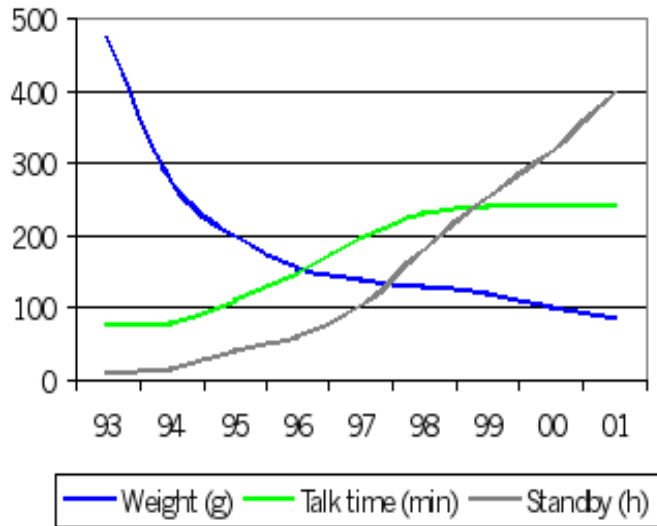
## A POSITIVE CHOICE

- 50% Bio-sourced plastic covers, reducing the amount of plastic and fossil fuels in production
- 60% less outer packaging meaning less paper and fewer trucks on the road
- New energy efficient charger – powers down when not in use



# Product Eco-Efficiency

## Products



- Minimizing of energy intensity
- Minimizing of material intensity of goods and services
- Extension of product durability
- Increasing of total efficiency in processes
- Minimizing of toxic dispersion
- Enhancement of recyclability
- Maximizing of the use of renewable resources

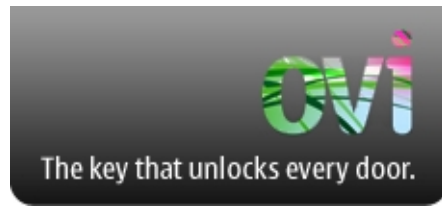
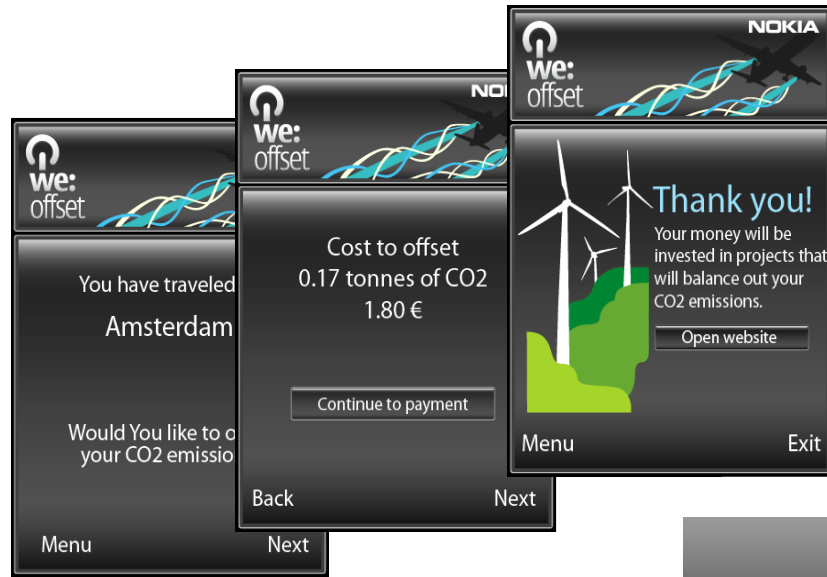
## System eco-efficiency





Note: Location TBD by Business Group

- sustainable Products
- service applications advocating green choices
- sustainable practices by Way of Working



- sustainable Products
- service applications advocating green choices
- **sustainable practices by Way of Working**



## Meet eye to eye without the need to fly

Now opened! Explore the specially designed Halo video collaboration suites with outstanding quality in Nokia House, Espoo and Southwood.

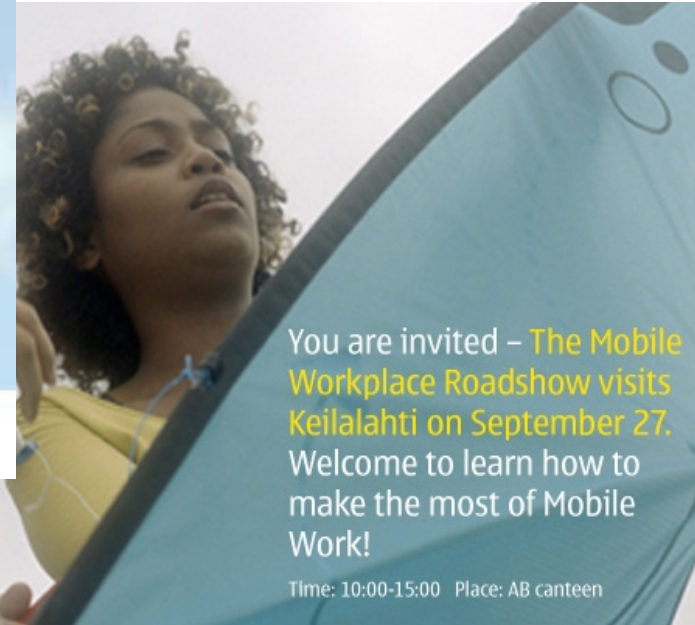
Welcome to the open day:

- September 18, at 11.00 - 17.00
- video conference 2 behind Berlin in Nokia House Espoo

You don't get it until you see it.  
Enjoy the coffee and enter a competition with good prizes!

Soon opening more suites: [www.connecting.nokia.com/halo](http://www.connecting.nokia.com/halo)

There are more than 1000 Nokia trips between Espoo and UK every month.  
Tackle the distance | Save your time | Improve work life balance | Save the environment | Be part of an Internet company



You are invited – **The Mobile Workplace Roadshow visits Keilalahti on September 27.**  
Welcome to learn how to make the most of Mobile Work!

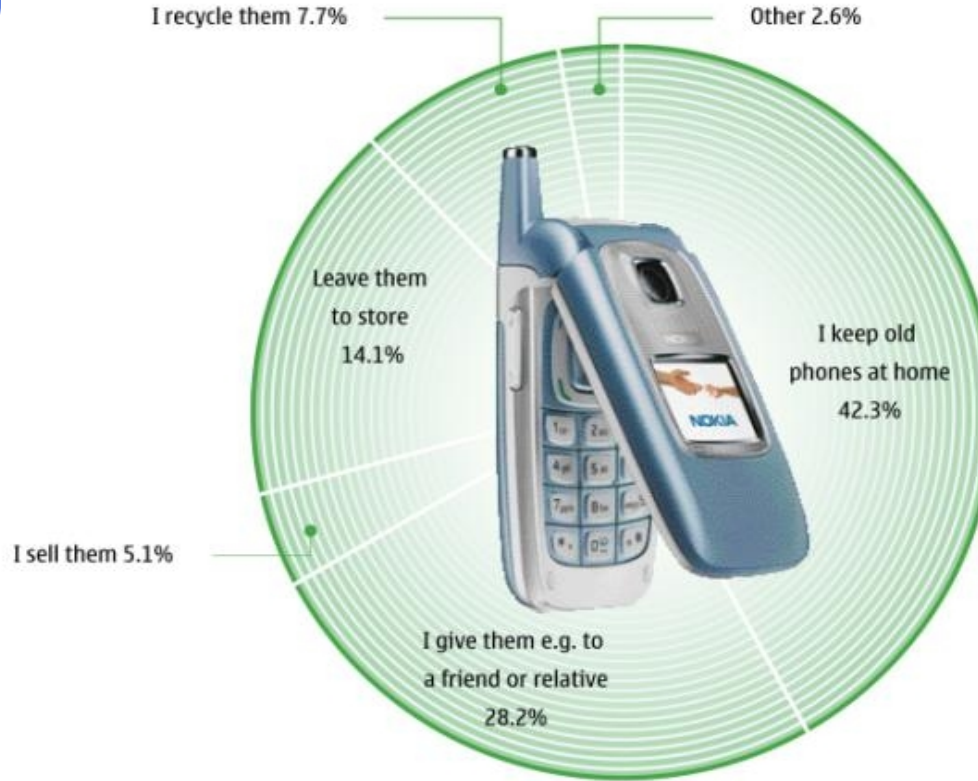
Time: 10:00-15:00 Place: AB canteen



  
climatecare helping you help the climate

# Recycling

## Where are all the phones in Finland



**The more people** start recycling their phones and packaging and use their phones longer...

...**the more we** can contribute to saving the planet.

# Recycling – the vision

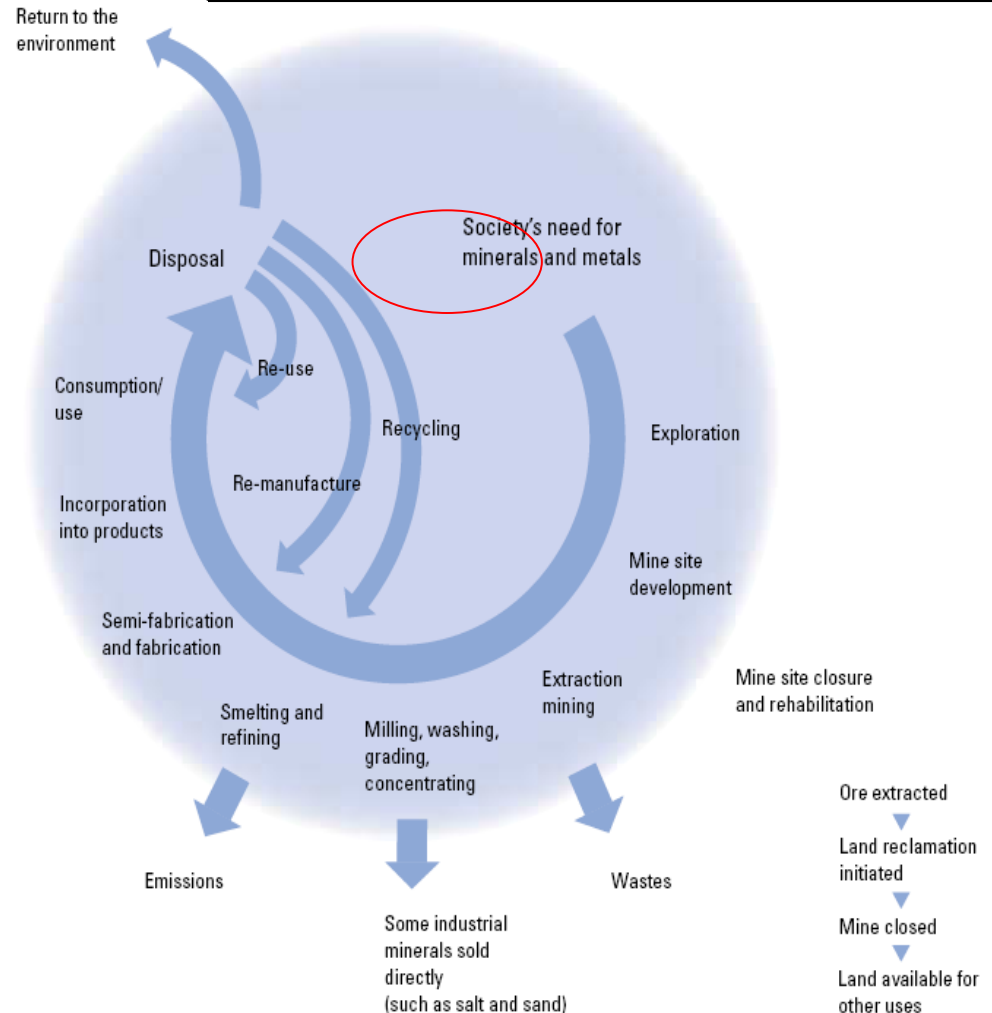


- Imagine a day when nearly a **billion people are connecting and working together** in small and big ways to help protect the environment.
- It won't happen overnight, but **every journey starts with a small step.**
- At Nokia, we've been developing solutions to make it easy for everyone to do their bit. With **over 900 million Nokia users** today, lots of little steps could add up to quite a lot.
- And if you'd like to do more, Nokia invites you to connect with like-minded people and get involved in helping us drive eco-innovation—our mission is **together to find ways for mobile technology to help the environment.**
- Because we know that the **Power of We** is much greater than the Power of Me.
- Nokia. Connecting People.

# Recycling metals

- Use of recycled metals saves from 60 to 90 % of energy, emissions and waste compared to the use of virgin metals in production
- Use of recycled metals is today only up to 40 %
- Landfilling or incineration of electronics may pollute the environment and removes the materials from the cycle

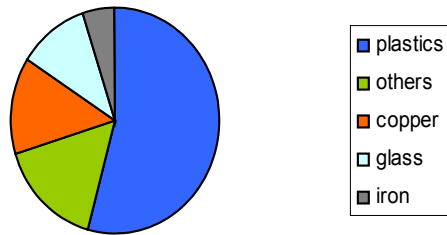
Recycling Scorecard	New metals from recycled metals	Energy & emissions savings
Aluminum	39%	95%
Copper	32%	85%
Steel	42%	62-74%



# Some thoughts



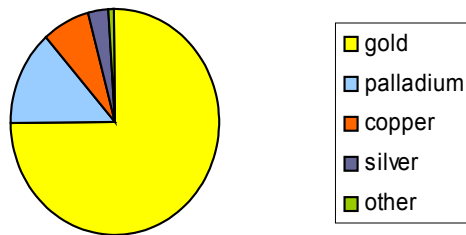
Weight distribution



- Obsolete mobile phones and Li-ion batteries are excellent source for extracting precious metals- phones contain ten times more gold than in an average gold mine
- Phones and batteries are available for recycling after they are no longer used; compared e.g. to the jewelry which is not disposed of.

Of every 1 0 0 0 tonnes of phones which leave our factories:

Value distribution



- By **changing the recycling** of our product from ~5 0 % to ~6 5 % then 2 6 tonnes of material re-enters the materials market place.
- By increasing the **collection rate** to 8 % and leaving our recycling processes unchanged; 4 0 tonnes of material re-enters the materials market place.



How can we turn waste into something beautiful?

We imagined a global system of increasingly smaller production circles;

where technical nutrients are reclaimed, recycled, and valued - ultimately changing the way we make things.

“Made from nothing new.”



## Remade on earth

How can we turn waste into something beautiful?  
We imagined a global system of increasingly smaller production circles; where technical nutrients are reclaimed, recycled, and valued - ultimately changing the way we make things.  
“Made from nothing new.”

**426,000**

426,000 mobile phones are retired in the USA daily



## Materials matter

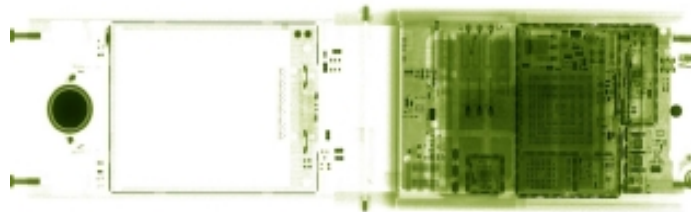
Made from upcycled soda cans, drink bottles, & car tyres – a conscious effort to preserve natural capital, reduce landfill, & stimulate technical cycles of life. This is the principle of economy in action.

95

Recycled aluminium requires 95% less energy than processing virgin material

- Recycled aluminium requires 95% less energy than processing virgin material
- Made from upcycled soda cans, drink bottles, & car tyres - a conscious effort
- to preserve natural capital, reduce landfill, & stimulate technical cycles of life.
- This is the principle of economy in action.
- Materials matter

Beyond skin deep - we're promoting performance inside with a range of better technologies; such as printed electronic components on non-toxic substrates, reduced superfluous interconnections, & improved chip-level efficiencies.



## A cleaner engine

Beyond skin deep – we're promoting performance inside with a range of better technologies; such as printed electronic components on non-toxic substrates, reduced superfluous interconnections, & improved chip-level efficiencies.

2

Currently 2% of phones are recycled through Nokia's take-back program