

Measuring sustainability in health care – model and tools in the prevention of diabetic foot ulcer

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I have no conflicts of
interests



Aims

- To evaluate sustainability costs and benefits in Health Care Systems
- Applicate the method - diabetic foot ulcer
- Digitalize the tool





50%

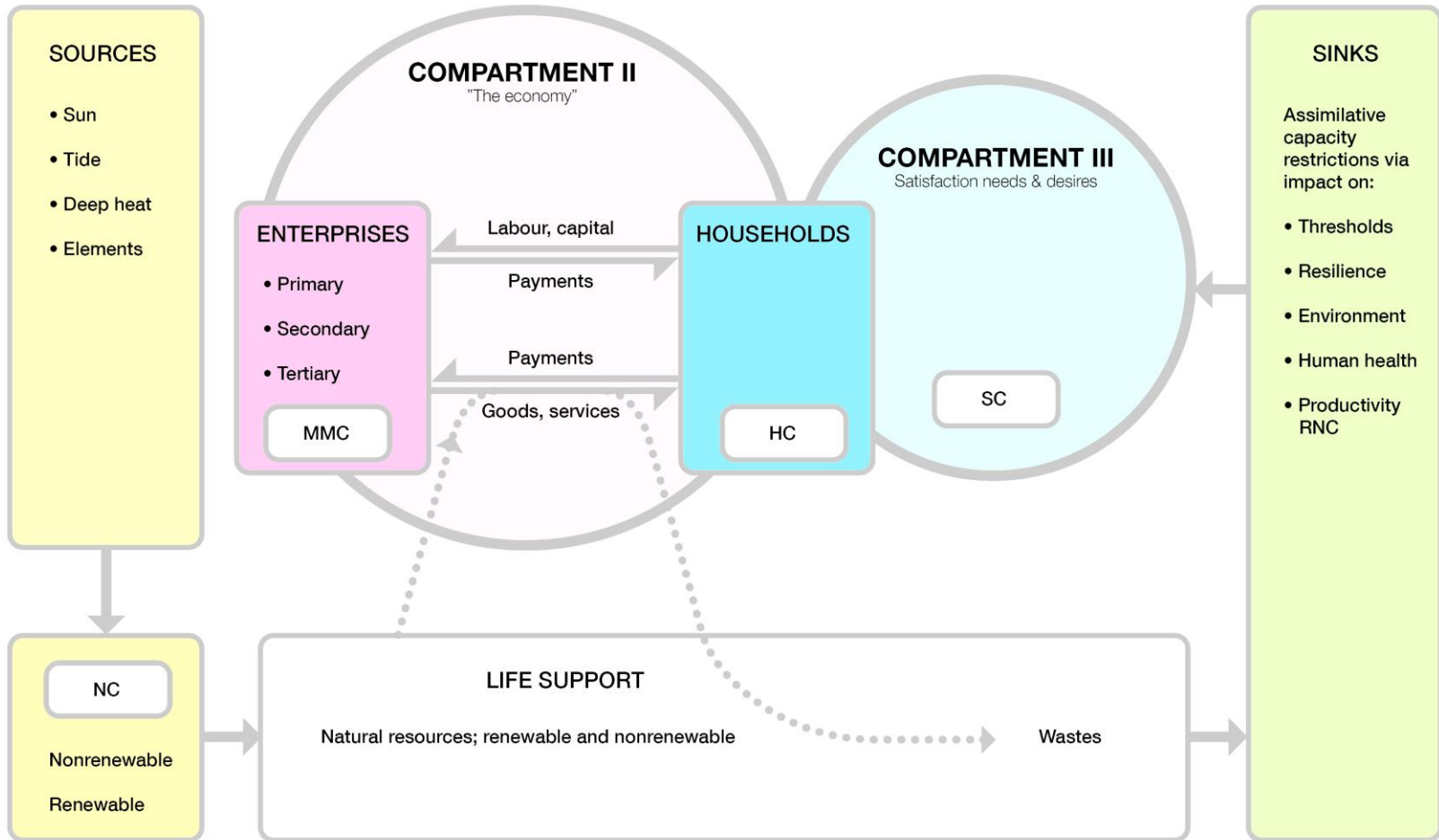
- in 2045 - 629 million people diabetes
- 3.7 million deaths due to diabetes
- 12.6 million deaths (23%) attributed to environmental conditions
- non communicable diseases kill 38 million/yr. 2012

COMPARTMENT I

Ecosystems including natural resources

Source-aspect

Sink-aspect



Is it possible to calculate the

- **ecological** footprints?
- **economic** foot prints?
- ***social*** foot prints?

Digital solution - time



The image shows a digital survey interface. At the top, there is a dark blue header bar containing the 'su-stain' logo on the left and a 'Fönsterklipp' button on the right. The main content area has a green background. In the center, there is a question in Swedish: 'Har du tagit ledigt från ditt arbete för dagens besök på Ortopedtekniska avdelningen?'. Below the question are two white buttons with rounded corners, labeled 'Ja' and 'Nej'.

su-stain Fönsterklipp

Har du tagit ledigt från ditt arbete för dagens besök på
Ortopedtekniska avdelningen?

Ja Nej

Digital solution - time



The screenshot shows a web application interface for 'su-stain'. The header is dark blue with the 'su-stain' logo on the left and a 'Fönsterklipp' button on the right. The main content area is green and contains a survey question in Swedish. Below the question are two input fields: 'Timmar' with a value of '1' and 'Minuter' with a value of '20'. At the bottom is a 'Svara' button.

su-stain Fönsterklipp

Hur länge uppskattar du att du blir borta från ditt arbete idag?

Timmar


1

Minuter

20

Svara

Digital solution - energy

 **su-stain**

Markera de transportmedel du använder för att ta dig till och från ortopedtekniska avdelningen idag?

Promenera

Cykel

Bil / Motorcykel

Buss

Tåg

Spårvagn

Båt

Results

- *Health-care services*
consume natural resources
energy → emissions
- Appropriate economic
resources... based on
ecological resources

Results

- Ecosystems and the landscape - *human wellbeing*
- Register online – waiting room

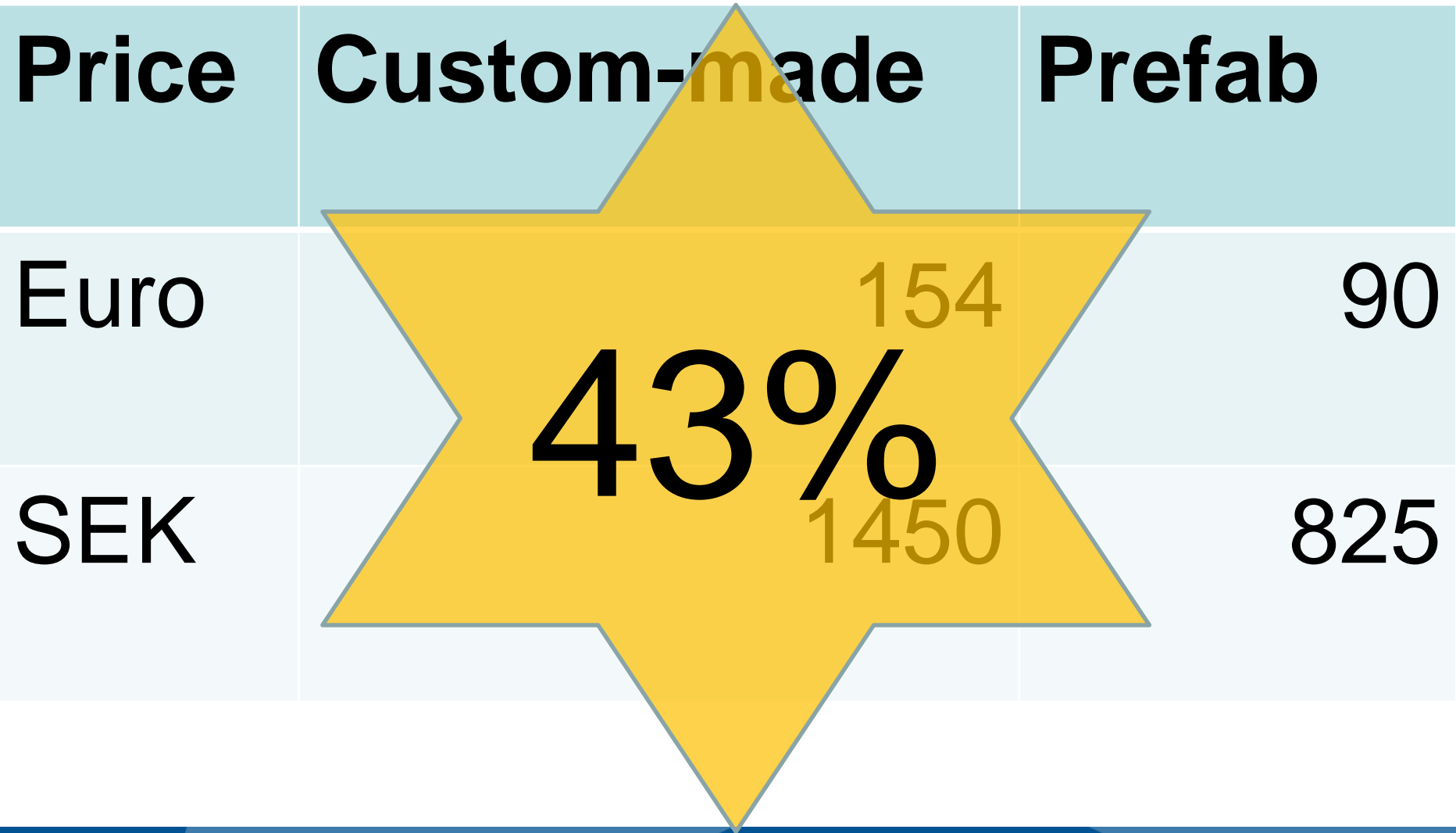
A light brown, curved shoe insert, possibly made of cardboard or a similar material, shown against a white background. The insert has a smooth, slightly textured surface and a gentle curve. The text "825 SEK" is printed in white, bold, sans-serif font in the center of the insert.

825 SEK

A dark grey, curved shoe insert, possibly made of a different material like leather or a high-quality synthetic material, shown against a white background. The insert has a smooth, slightly textured surface and a gentle curve. The text "1450 SEK" is printed in white, bold, sans-serif font in the center of the insert.

1450 SEK

Costs, 2010

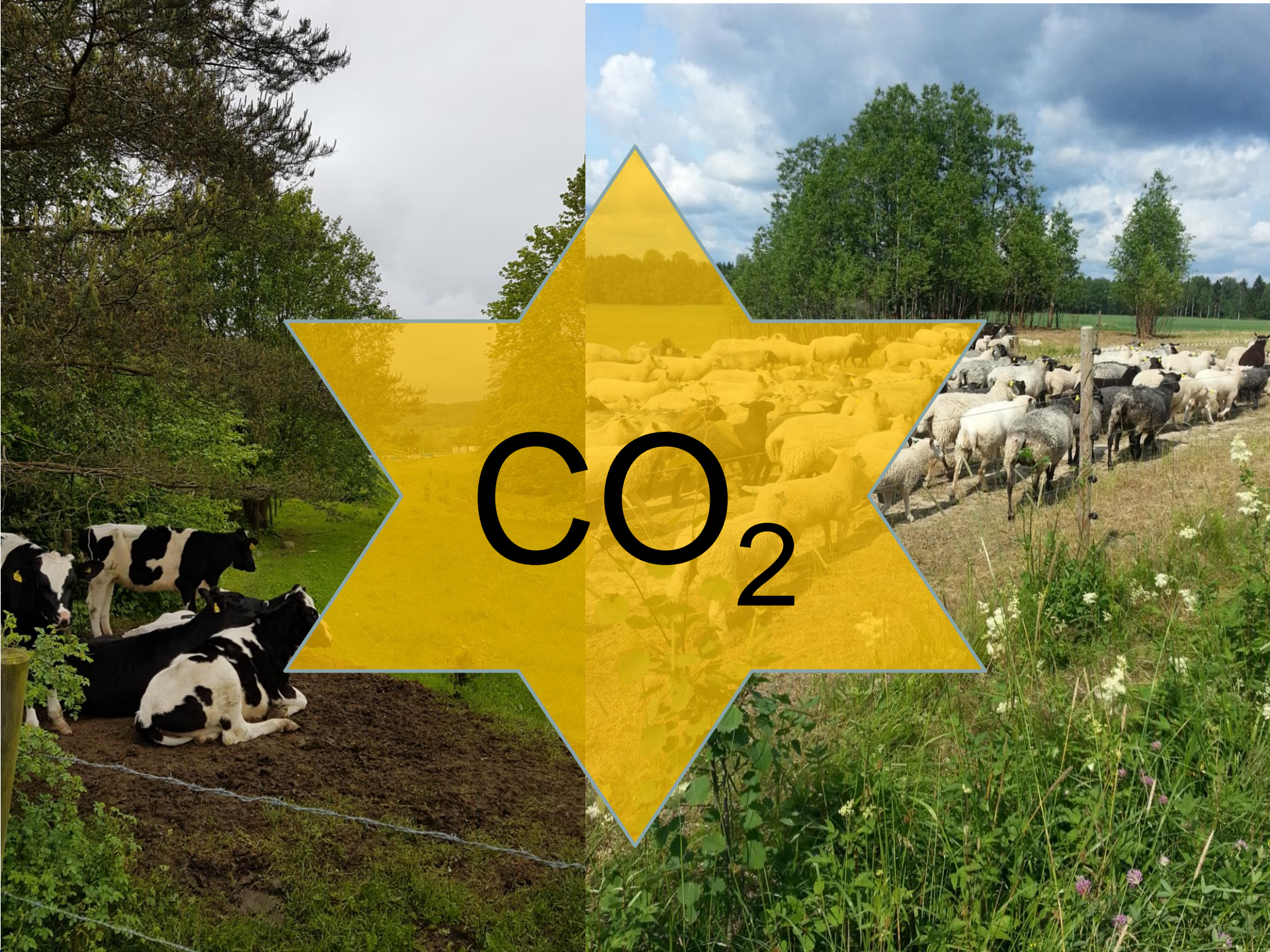




One visit

Conclusions

- Quantified **energy** for transports to *health-care services* and
- their **emissions**
- related **costs**



CO₂

Conclusions continued

- The *need of prevention and care*
- *Time* and *efforts* for the patients

Conclusions continued

- *50% reduction of DFU* → saving 50 billion US\$/yrs.
- Prevention and care of diabetes a NCD, in relation to the 17 SDGs.

SUSTAINABLE DEVELOPMENT GOALS



Relevance

- A method to quantifies *needs of DFU care*, the *costs* for patients, their employers, *environment*
- Identifies smart *treatments*
- *Ecological footprints*
→ planetary borders