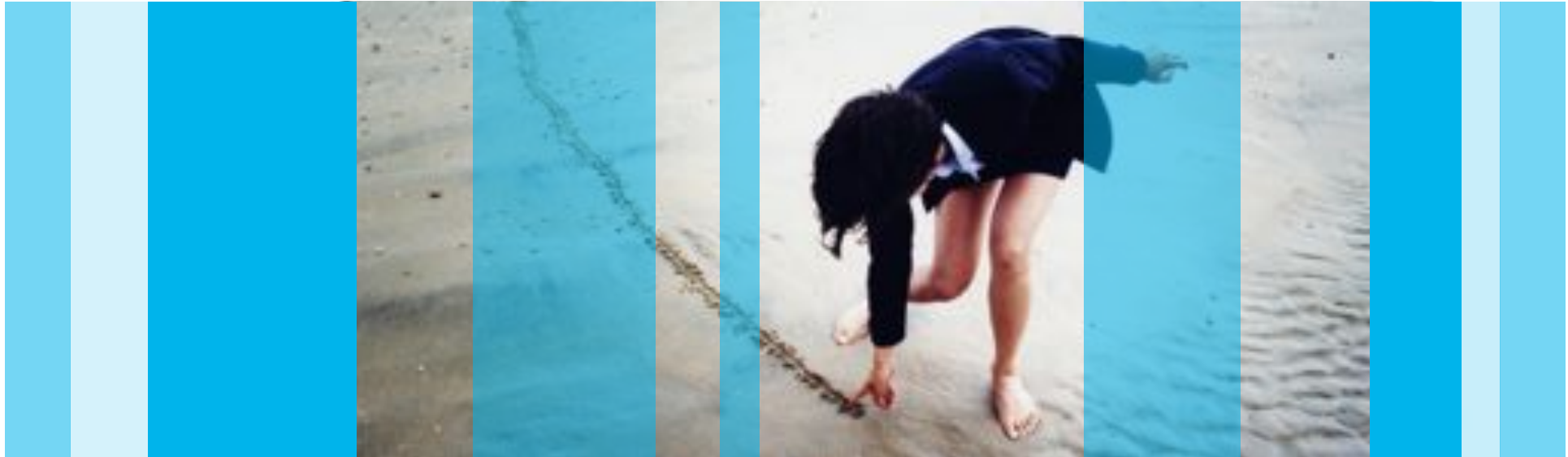




Software Improvement Group



Green Application Hosting

Joost Visser, Software Improvement Group @sig_eu

Radboud University Nijmegen

Knowledge Network Green Software #KNGS

May 2012

T +31 20 314 0950
info@sig.eu
www.sig.eu

Wirth's Law

a.k.a. the great Moore's Law compensator



Software Improvement Group

2 | 6

**“Software is getting slower more rapidly
than hardware becomes faster.”**

Niklaus Wirth, “A Plea for Lean Software”, Computer 28, 1995

Hardware became more powerful, but
does your word processor run faster?

Do you need results of a search query
while you are still typing it?

Software is key to Green IT



Software Improvement Group



3 | 6

Hardware consumes energy

Why?

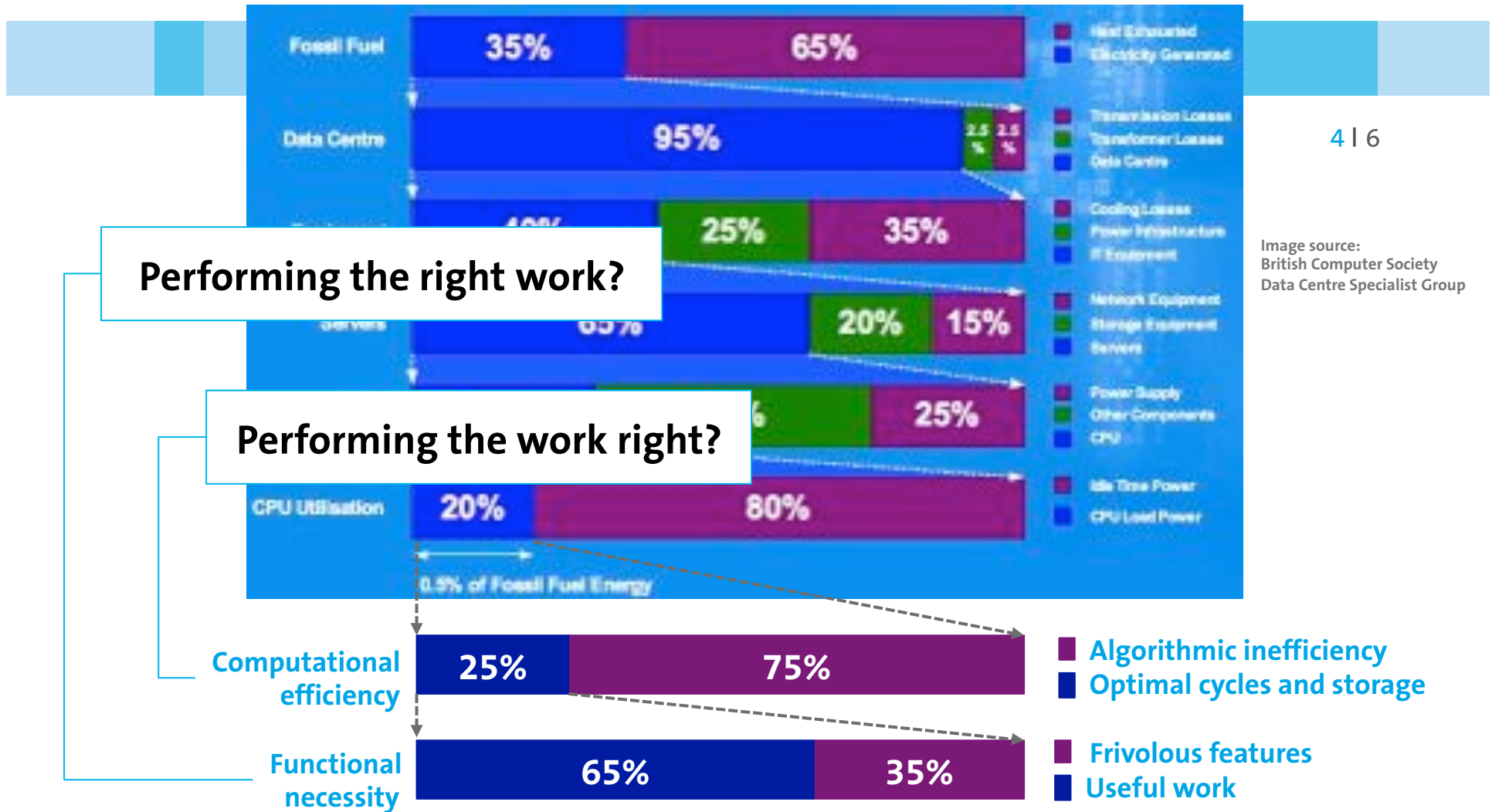
Because software tells it to.

Power Loss Chain

Extended version ...



Software Improvement Group



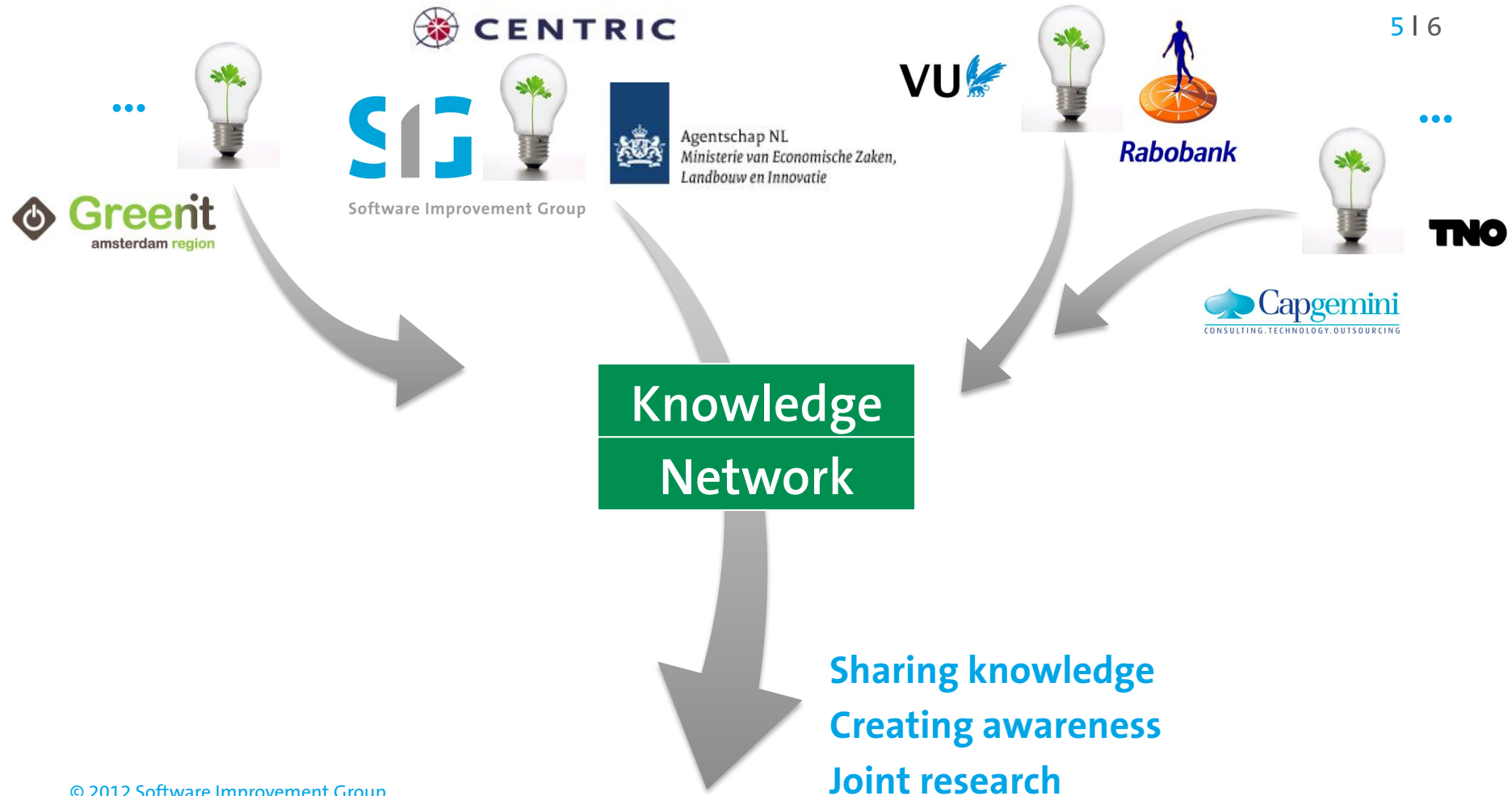
4 | 6

Image source:
British Computer Society
Data Centre Specialist Group

Percentages are indicative only

Knowledge Network Green Software

knngs.wikidot.com



Green Application Hosting



Software Improvement Group

6 | 6

Problem

- In traditional hosting contracts cost reduction due to energy savings do not necessarily directly benefit the application owners.

Perspectives

- Supplier: what incentives exist currently?
- Measurement: how can DC energy consumption be attributed to applications?
- Billing: how can application owners benefit from energy optimizations?

Speakers

- Ot de Wiljes en Funs Kessen (Schuberg Philis)
- Frank van Bokhoven (Energy Software Solutions)
- Jan Wiersma (EvoSwitch)
- Bo Merkus (CleanTech, HvA) and Miguel Ferreira (SIG)

Discussion
John Post
Green IT consortium



Software Improvement Group



7 | 6



**Knowledge Network
Green Software**

@KNGreenSoftware

#KNGS

kngs.wikidot.com



Prof. dr ir Joost Visser

j.visser@sig.eu

@jstvssr

www.sig.eu

+31 20 314 0950