



KREISLAUFWIRTSCHAFT IN DER IT

23.11.2022

MATTHIAS DI FELICE - CEO

COMPURITAS GMBH



Professionelles IT Refurbishment aus Graz



Trigos Österreich 2011



Österreichischer Klimaschutzpreis 2012



Gewinner 2 Minuten 2 Millionen 2013



Staatspreis Österreich 2018
Ressourceneffizienz



KATEGORIE
ERDE

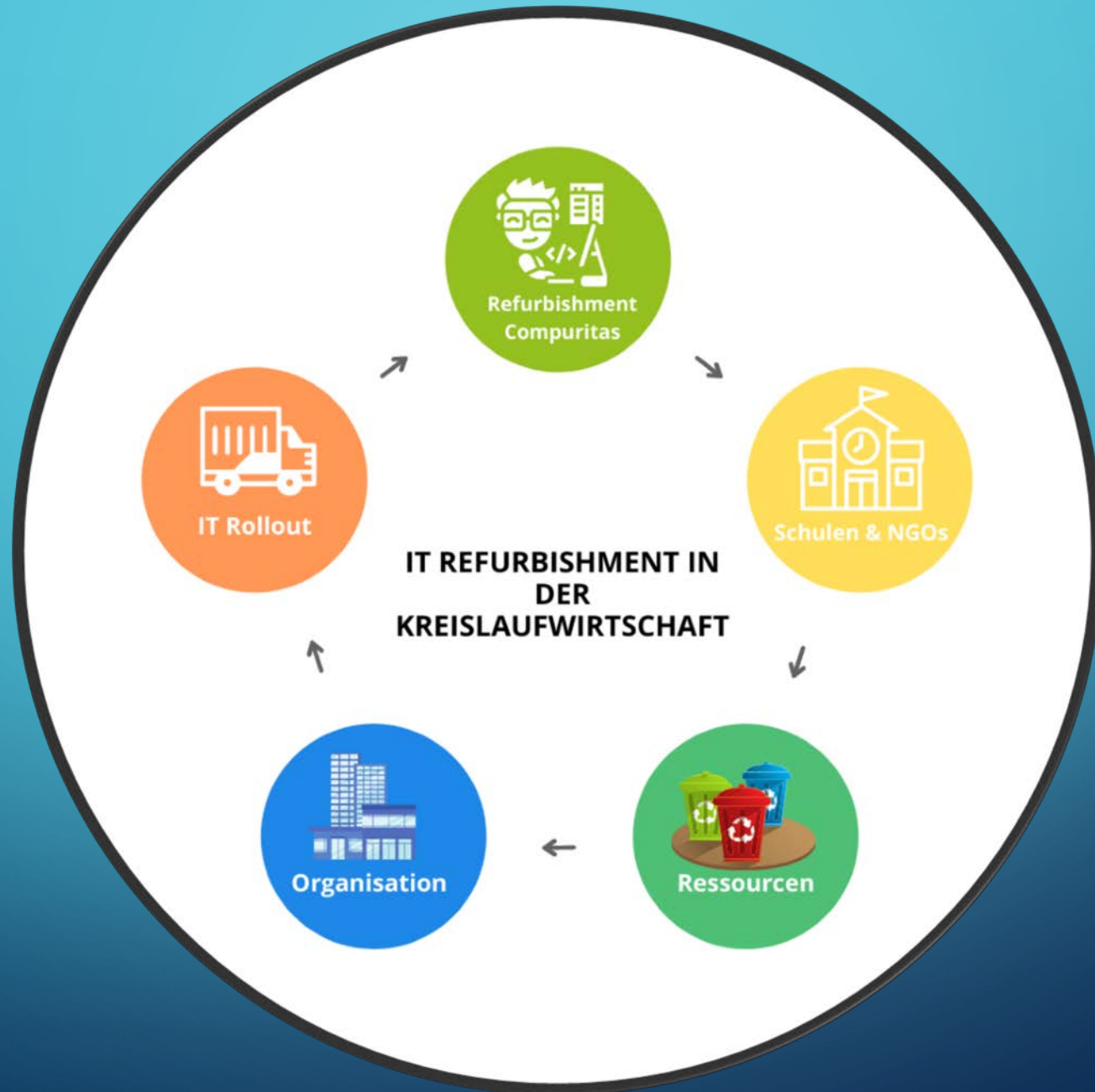
PUBLIKUMSSIEGER

ENERGY GLOBE
Austria

2021

COMPURITAS MISSION

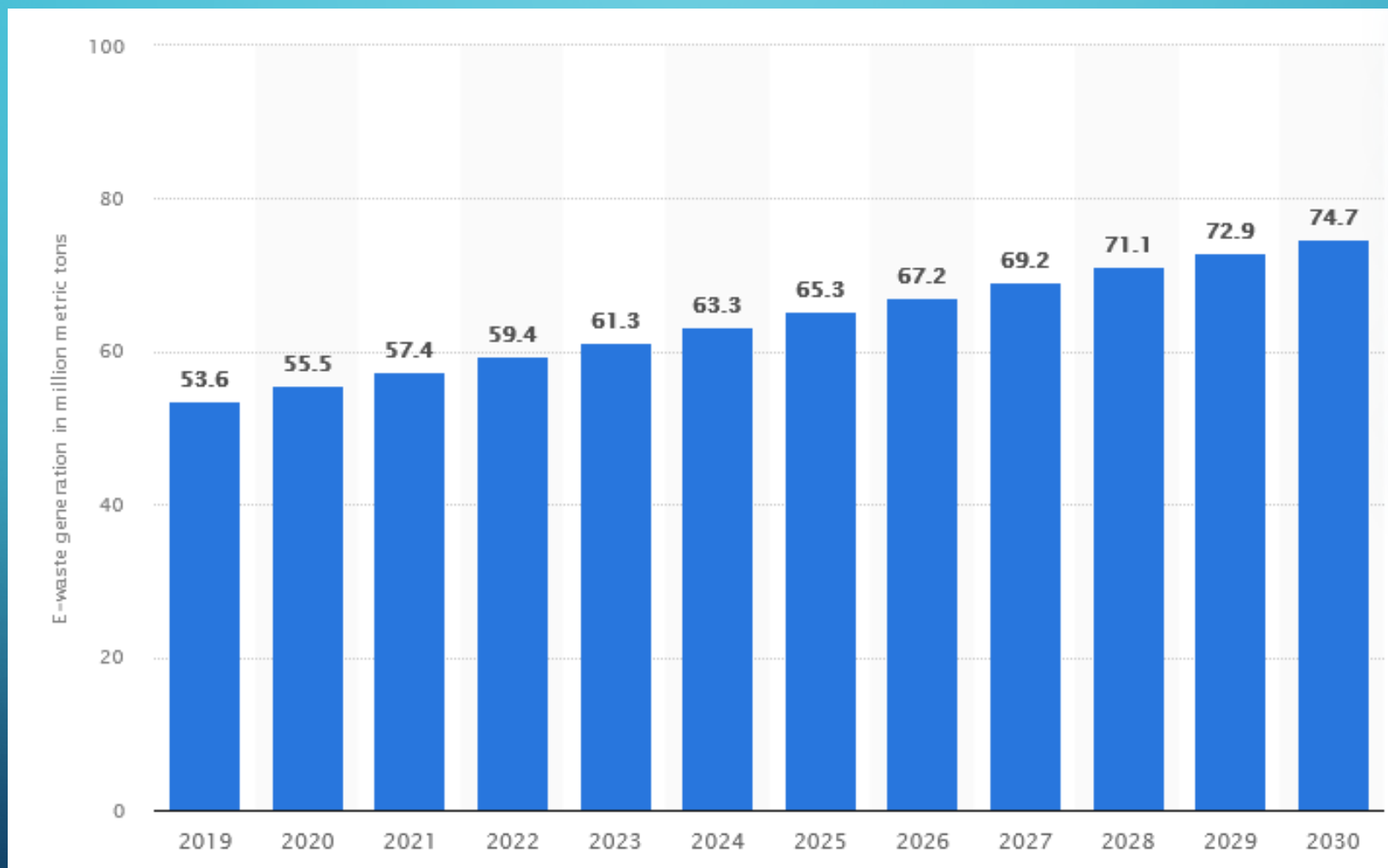
*„Wir möchten die Lebensdauer von IT Produkten
mindestens verdoppeln und gleichzeitig den
Digital Gap verkleinern.“*



The image features a blue gradient background with white circuit-like lines in the corners. These lines consist of straight paths that branch out and terminate in small circles, resembling a network or data flow diagram. The lines are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

WARUM MACHEN WIR DAS?

PROJECTED ELECTRONIC WASTE GENERATION WORLDWIDE FROM 2019 TO 2030 (IN MILLION METRIC TONS)*

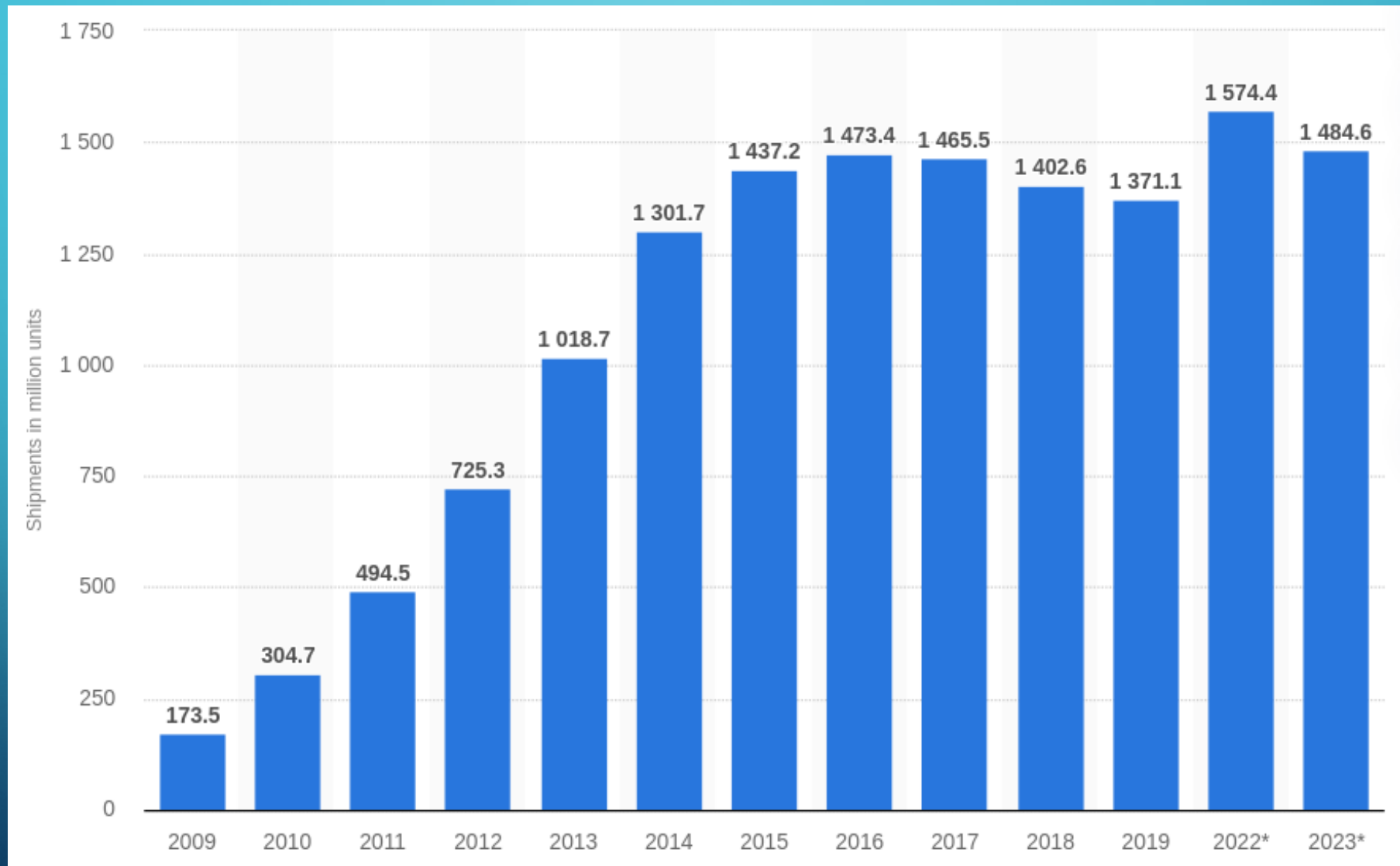


Source: Statista 2021, <https://tinyurl.com/mvwbjhfe>

WIE VIEL WIRD DAVON RECYCELT?

*2019 wurden vom globalen E-Schrott nur ca.
17-20% fachgerecht recycelt.*

GLOBAL SMARTPHONE SHIPMENT FORECAST FROM 2010 TO 2023



Source: Statista 2021, <https://tinyurl.com/42v5z8d2>

WIE VIELE BALLONS KANNST DU MIT 1 KG CO₂ FÜLLEN?

- ca. 204 Ballons



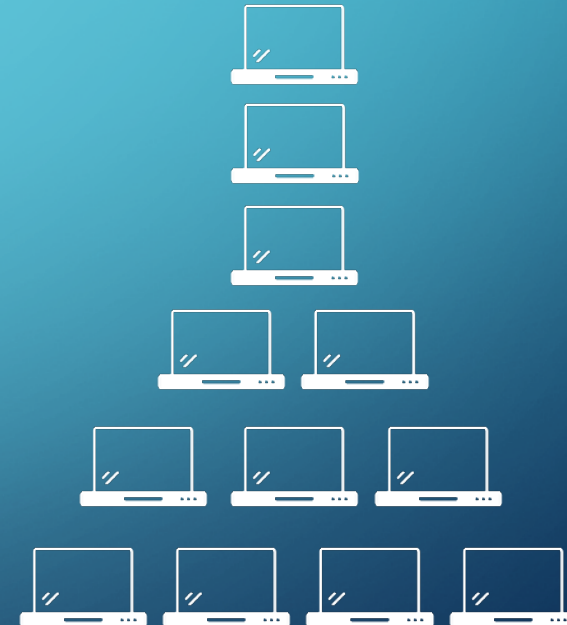
- Pro Jahr atmen wir ca. 168kg CO₂ aus

WIE VIEL CO₂ „STECKT“ IN DEINEM NOTEBOOK?

Dieselauto ca. 2 Tonnen CO₂ pro Jahr



ca. 150 - 250 kg CO₂
entspricht ca. 12 Stk.



PROBLEME IN DEINEN ELEKTRONIKGERÄTEN

- **Konfliktminerale**
 - z.B. Tantal (vom Koltan-Erz), Zinn, Wolfram, Gold
 - eng verbunden mit großen Menschenrechtsverletzungen
 - zB Kinderarbeit, Gewalt, Krieg, etc.



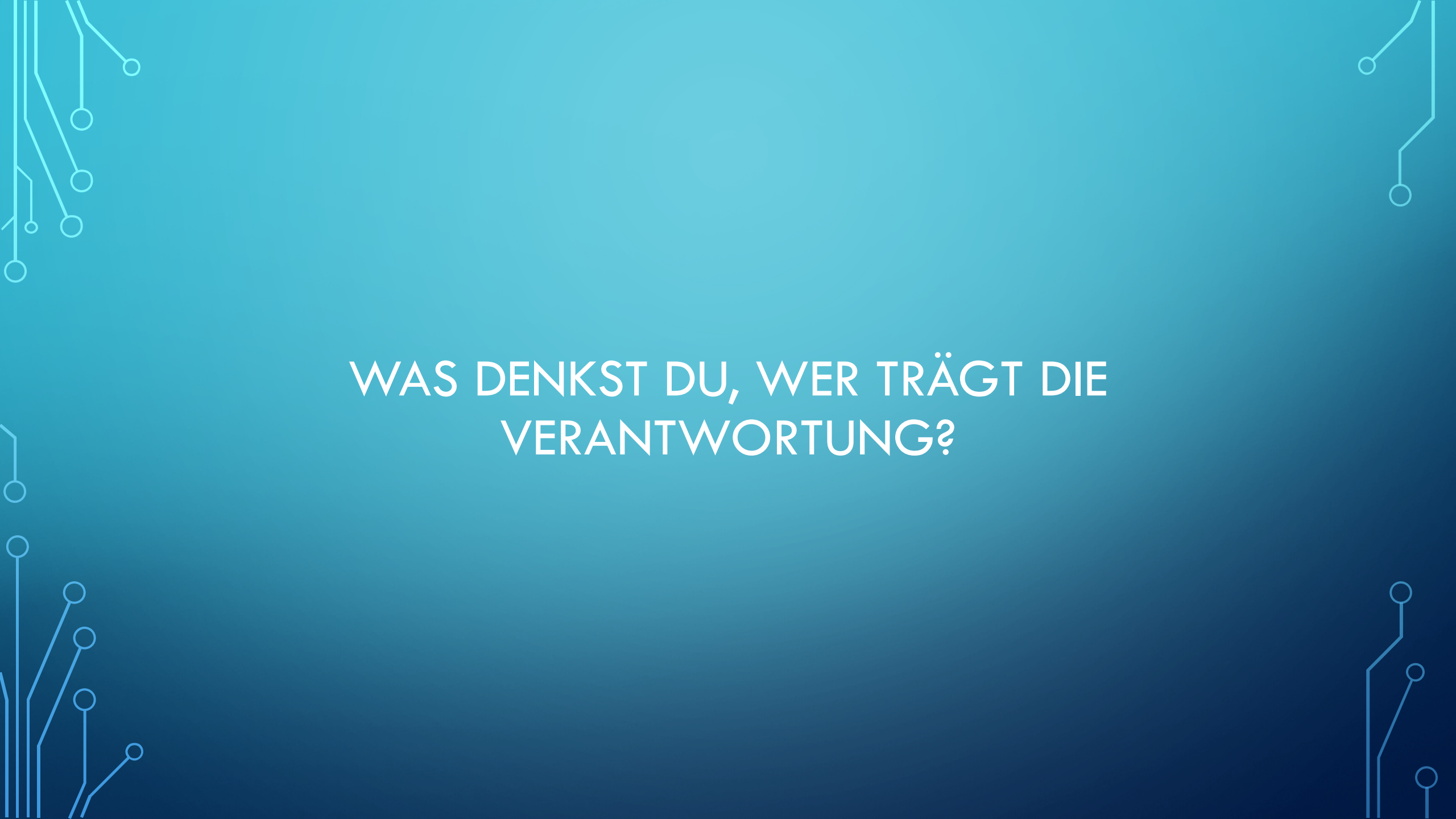
PROBLEME IN DEINEN ELEKTRONIKGERÄTEN

- Produktion

- Arbeit 70-80h/Woche
- wenig Pausen
- extremer Druck

- Fangnetze die Lösung???

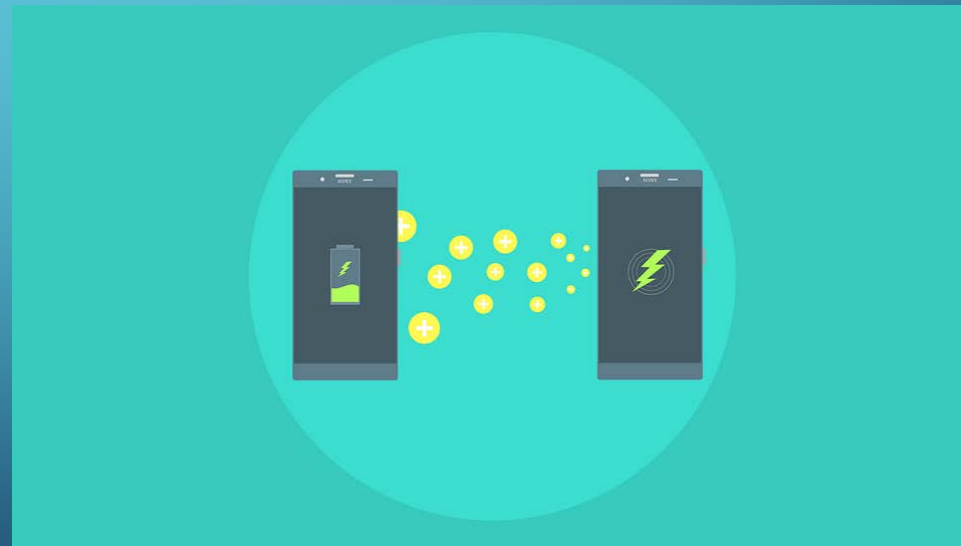


The image features a dark blue gradient background with white, stylized circuit board traces in the corners. These traces consist of straight lines and small circles, resembling electronic components or data paths. The traces are located in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

WAS DENKST DU, WER TRÄGT DIE
VERANTWORTUNG?

BEISPIEL GRAUE ENERGIE

- „unsichtbar“ und doch riesengroß
- Smartphone ca. 220 kWh – Graue Energie in der Produktion
 - → ca. 2 Jahre lang Akku aufladen



The background is a dark blue gradient. In the corners, there are decorative white line-art elements resembling circuit traces or neural network connections, with small circles at the end of the lines.

HILFE! WIR BRAUCHEN LÖSUNGEN!

QUALITÄT

GARANTIE

REPARIERBARKEIT

LÄNGER NUTZEN

REFURBISHMENT

SMARTPHONE REPAIRABILITY SCORES



**iPhone
13 Pro**
2021

- + Display and battery replacements remain a priority in the new iPhones' design.
- + Most other components are modular and easy to access or replace.
- Once again, double glass means double drop damage, and despite the improvements to durability over the years, there's still no easy way to replace the rear glass.

6



**Samsung
Galaxy Z Flip**
2020

- Glued-down glass panels are an unnecessary barrier to entry for repairs, especially given the phone's lack of ingress protection.
- Battery replacements are possible, but unnecessarily difficult due to poorly-routed cables and the lack of stretch-release adhesive.
- The components involved in the folding process are likely to wear over time (even if you don't bathe them in purple dust), necessitating eventual replacement.

2



Fairphone
3
2019

- + Key components like the battery and screen have been prioritized in the design and are accessible either without tools or just a regular Phillips screwdriver.
- + Visual cues inside the phone help with disassembling and replacing its parts and modules.
- + Replacing complete modules is very easy. Going for their internal parts is also possible and requires a Torx screwdriver.

10

LAPTOP REPAIRABILITY SCORES



**EliteBook
800 G5**
2020

- + RAM, SSD, and battery are easily accessible and removable.
- + All moving parts, including keyboard, trackpad, and pointing stick are modular and can be independently replaced.
- + The display can be quickly and independently replaced without any unnecessary disassembly.

10



**MacBook
Pro 15" Touch Bar**
2019

- The processor, RAM, and flash memory are soldered to the logic board. Repairs and upgrades will be impractical at best.
- The top case assembly, including the keyboard, battery, speakers, and Touch Bar, is glued together—making all those components impractical to replace separately.
- The Touch ID sensor doubles as the power switch, and is paired with the T2 chip on the logic board. Fixing a broken power switch may require help from Apple, or a new logic board.

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IS IT ABOUT TECHNOLOGY... OR BUSINESS?



#WEITERLERNEN

- Initiative des BMBWF die Schüler:innen seit Beginn der Pandemie mit Nachhilfe und Refurbished IT unterstützt.
- Firmenhardwarespenden ständig gesucht!



Bundesministerium
Bildung, Wissenschaft
und Forschung

Umgesetzt vom sozialen Bildungsnetzwerk talentify

talentify.at

VIELEN DANK!



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