

Best practice

for safe and efficient
flat panel display recycling



IZAURA JASINSKIENĖ, LITHUANIA



Imagine







PEASERS ASCENDING SUMMIT OF CHILRODT PASS.

COPYRIGHT 1894







1897
KLONDIKE

— But —

what
happened next





— Something —
similar
today

Three gold bars are stacked vertically. The top bar is embossed with '21st', the middle bar with 'Century', and the bottom bar with 'Klondikes'. The bars are set against a black background with a spotlight effect.

21st

Century

Klondikes

The image features three gold bars stacked vertically. The top bar has the word 'Inside' engraved on it. The middle bar has 'TV screens' engraved on it. The bottom bar has 'and monitors' engraved on it. The bars are set against a background with a red-to-blue gradient. The lighting is dramatic, highlighting the metallic texture of the bars.

Inside

TV screens

and monitors

Inside
TV screens
and monitors



Preserved

or lost



— The —

flat panel display recycling

c o m p a n y i n L i t h u a n i a



— 250,000 —

The image is a horizontal collage. The left half shows a close-up of several server racks, some with green straps, suggesting electronic waste. The right half shows a pile of dark, granular material with several bright, irregular gold nuggets scattered on top. A dark, semi-transparent rectangular box is centered over the image, containing the text "18 kg gold" in a light-colored, serif font, flanked by horizontal lines.

— 18 kg gold —



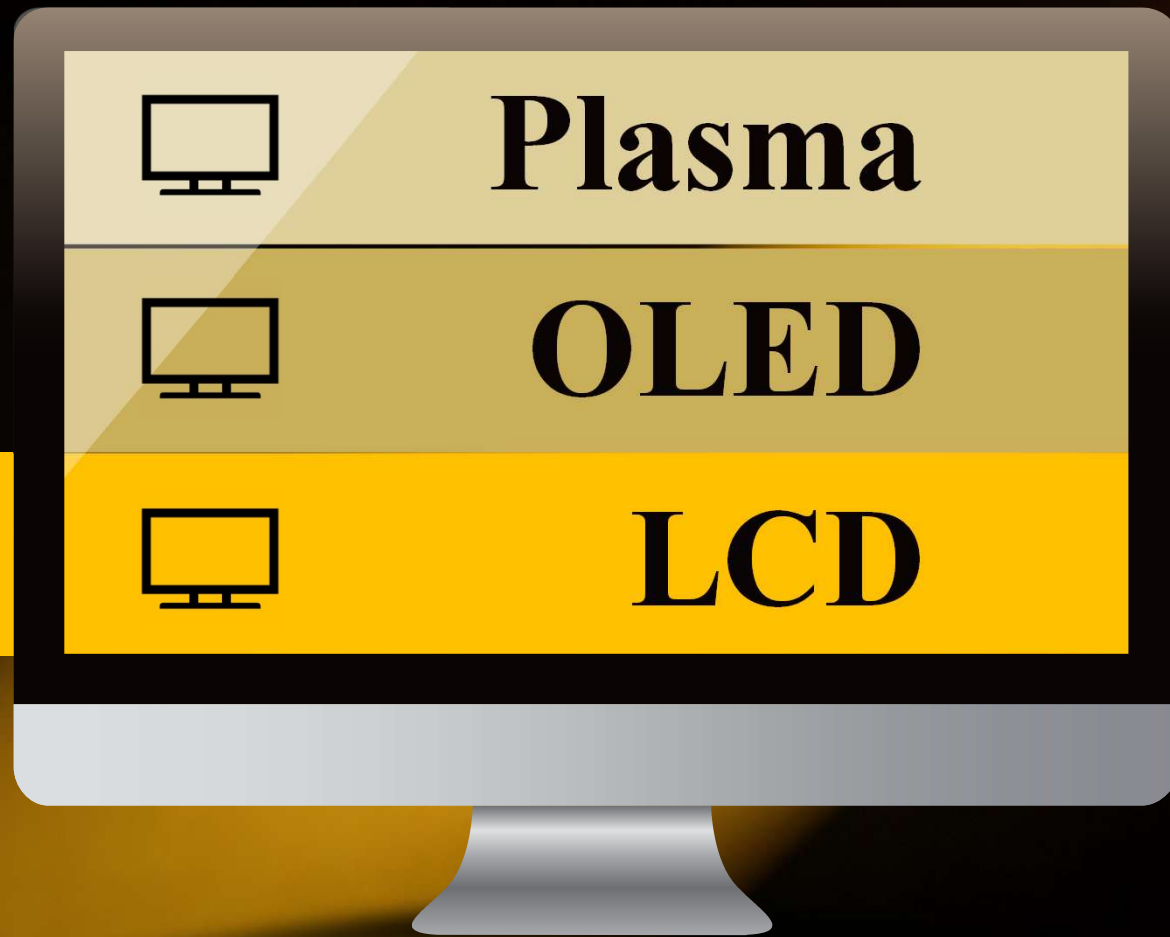
Why?





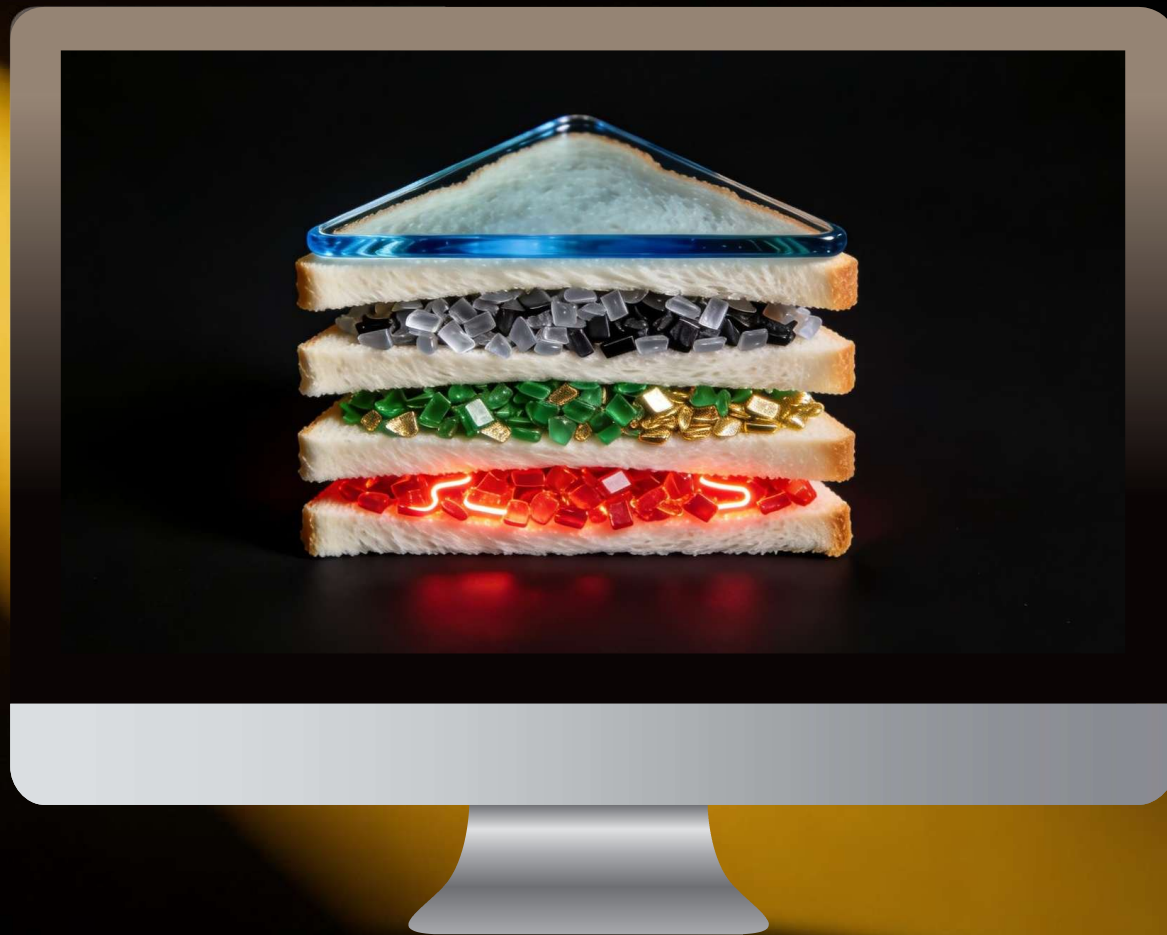
Flat panel —
displays —

Dominate



— No average TV —









Why

displays need special
treatment? —————

Important



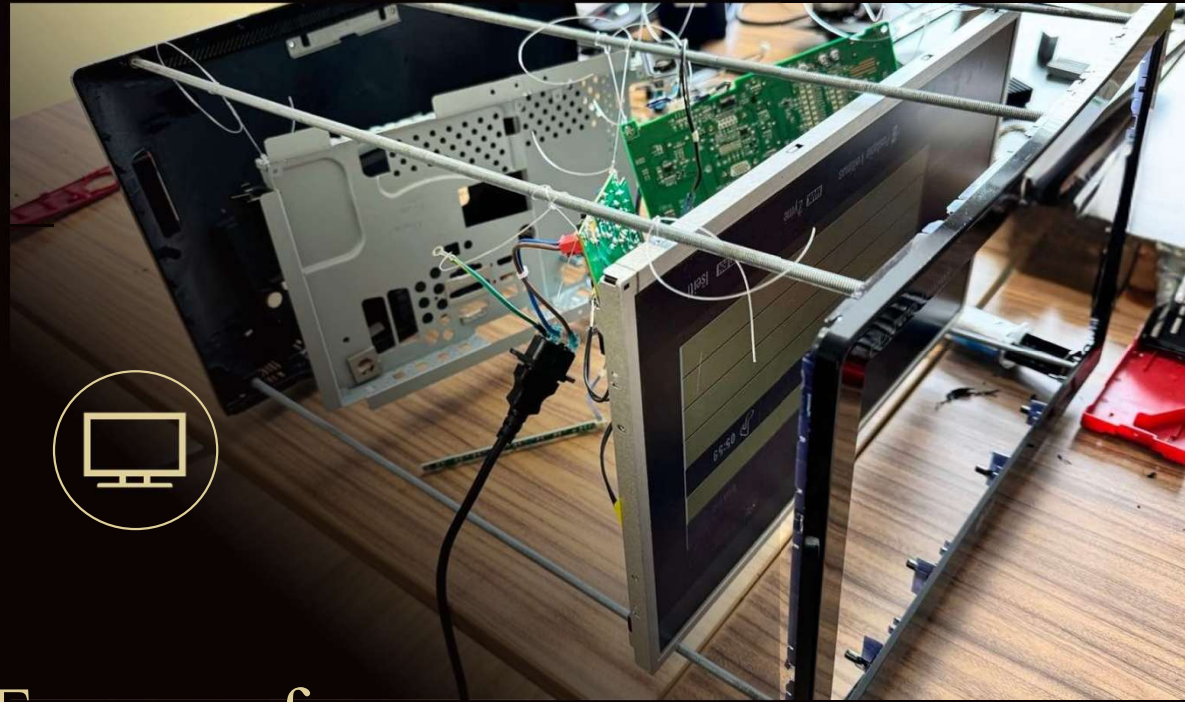
Separate
hazardous
fractions



Maintain
material
quality



Ensure safe
working
conditions







Three main —
approaches —

A black computer monitor on a stand, displaying the number '01' in a gold serif font. The monitor is positioned in the upper center of the frame. The background is dark with a diagonal gold light beam passing behind the monitor.

01

Automated — treatment systems —

A computer monitor with a dark bezel and a stand, displaying the text "Product-level" in a light-colored serif font. The monitor is set against a dark background with a diagonal yellow light gradient.

Product-level

Material-level



A computer monitor with a dark blue screen and a black bezel. The screen displays the text "Automation applied at the product-level" in a yellow, serif font. The monitor is set against a dark background with a bright yellow light source on the right side, creating a glow effect. The monitor's stand is visible at the bottom.

Automation applied at the
product-level



— Not uniform —



The remaining product

follows one of two paths:



It goes to shredding | *materials become mixed*

Or the process | *continues manually*

— The —
question is —

where and how
automation is applied

—

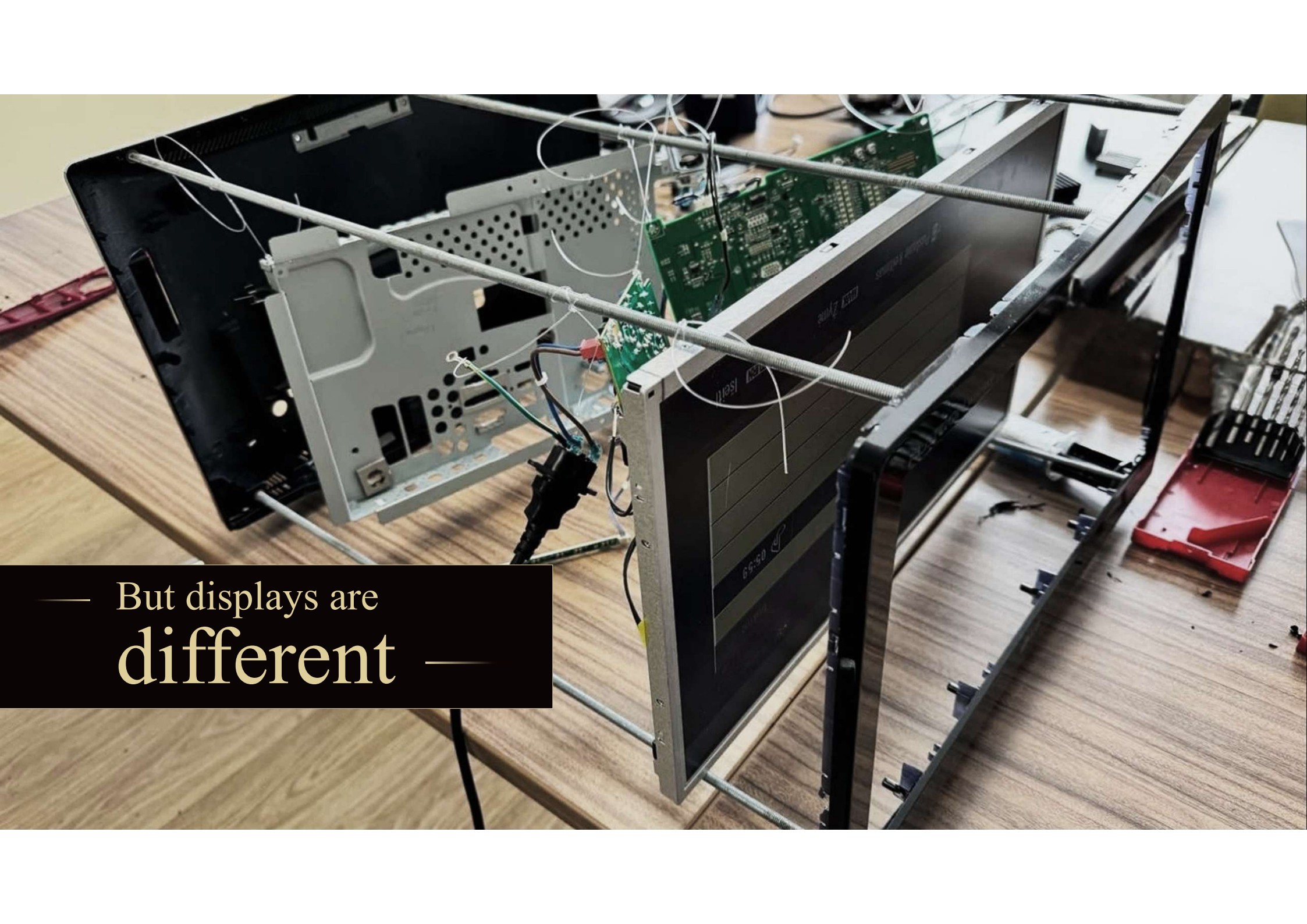


Three main —
approaches —

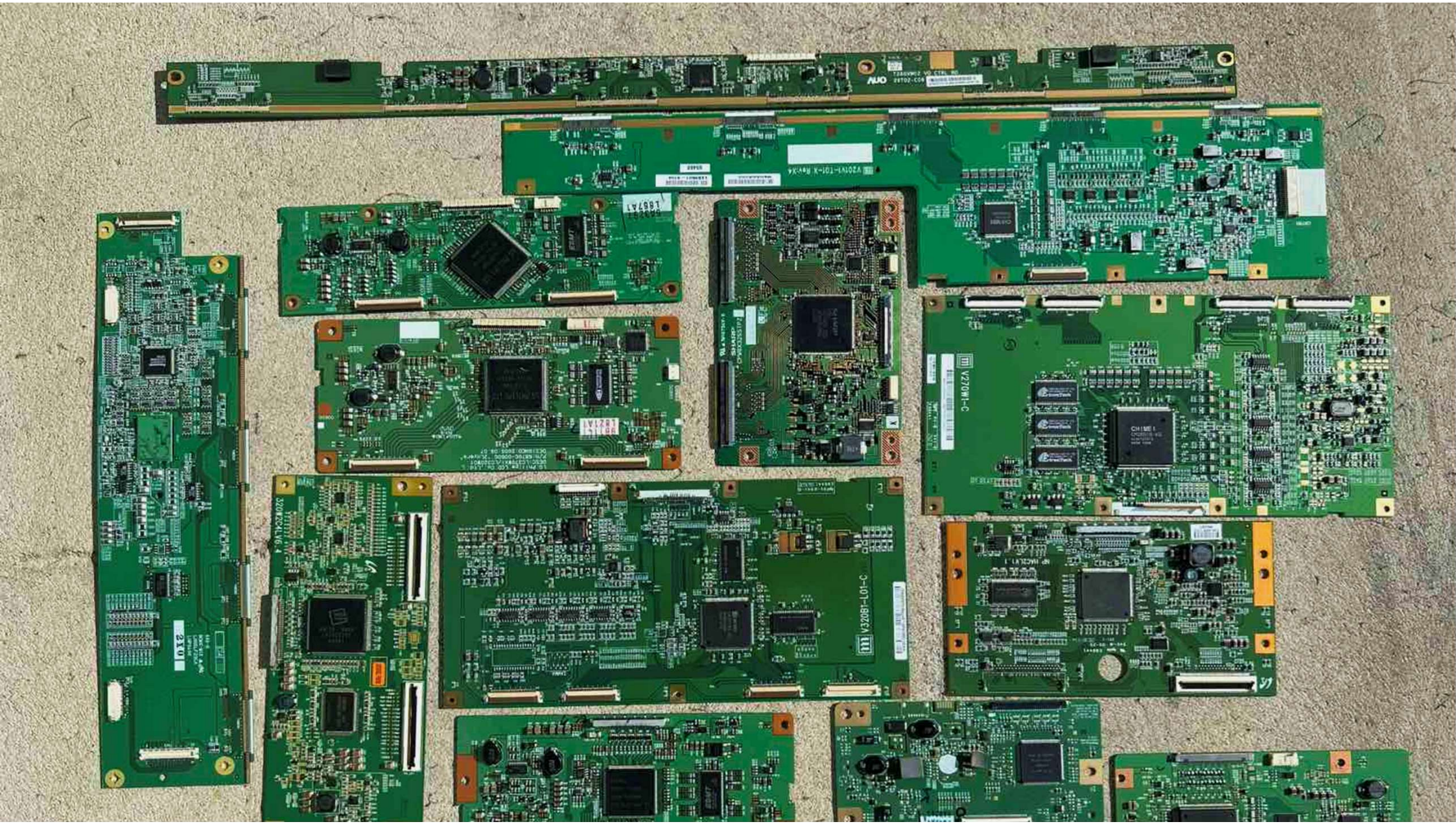
A black computer monitor with a stand, displaying the number '02' in a gold serif font. The monitor is positioned in the upper center of the frame. The background is dark with a diagonal beam of gold light passing behind the monitor.

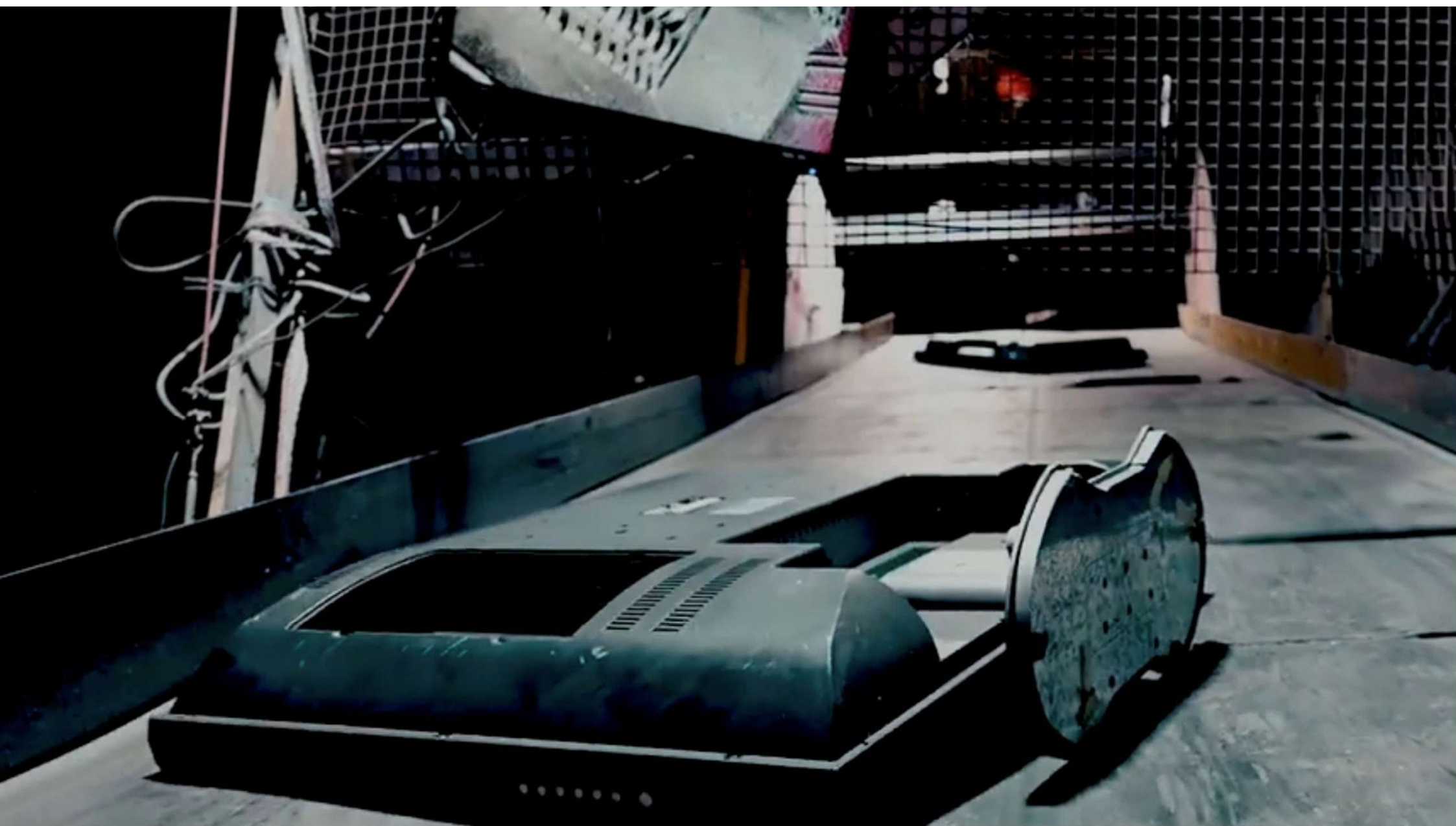
02

Mechanical — shredding —



— But displays are
different —





The
question:

can this still be considered
proper treatment?



Three main —
approaches —

A black computer monitor with a stand, displaying the number '03' in a large, yellow, serif font. The monitor is positioned in the upper center of the frame. The background is dark with a diagonal beam of yellow light passing behind the monitor.

03

Manual dismantling



— Used in Lithuania —

The incoming stream —
contains —

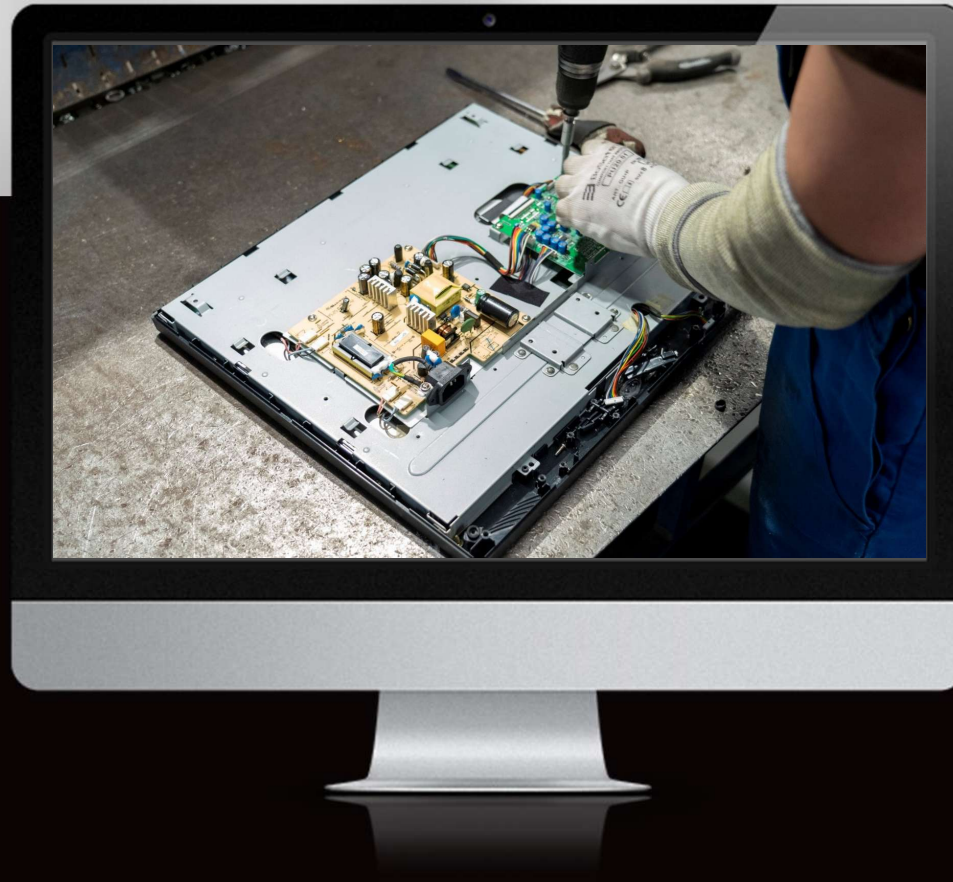
- damaged displays,
- bent displays,
- different generations and
- different sizes.



1 person. | 1 tonne.

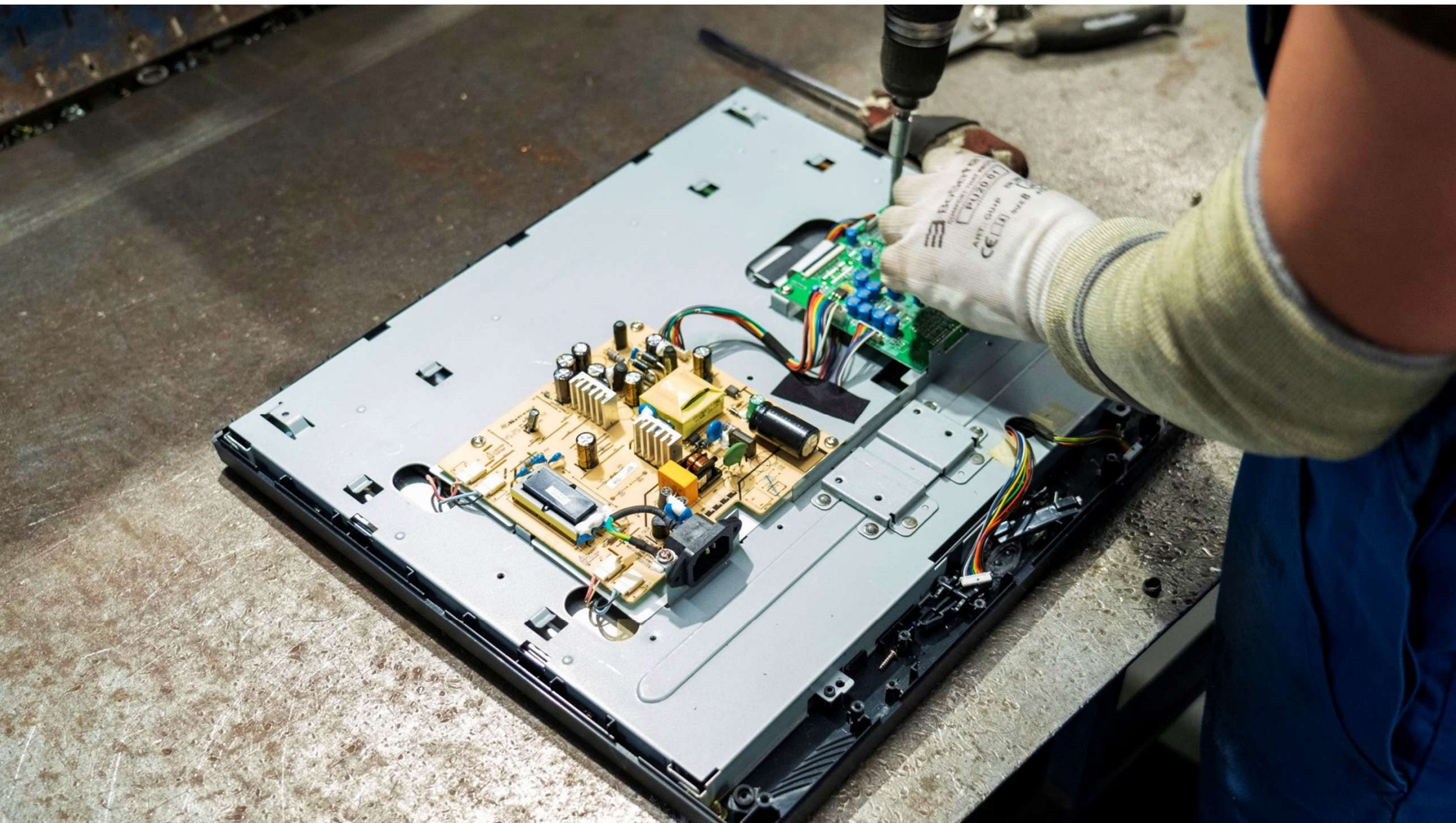
30

dismantlers



1.500

displays
every day





— Still a risk —



Plastics

*Another
challenge*









Why

early shredding
dominates? —————

Izaura Jasinskienė

