



**ENERGIE  
SPAR  
KOMMISSAR**





**WAS SIE ÜBER ENERGIESPAREN WISSEN MÜSSEN -  
MIT KLEINEN MASSNAHMEN GROSSES BEWIRKEN**















20

LITER/100 KM

10

LITER/100 KM

5

LITER/100 KM



**WÄRMEENERGIE  
VERBRAUCH  
(JAHR)**

**:**

**BEHEIZTE WOHNFLÄCHE**





**WÄRMEENERGIE : BEHEIZTE WOHNFLÄCHE**





**vor  
1978**

**1978  
bis  
1995**

**nach  
1995**

**TYPISCHE EKZ  
DER BAUJAHRE**

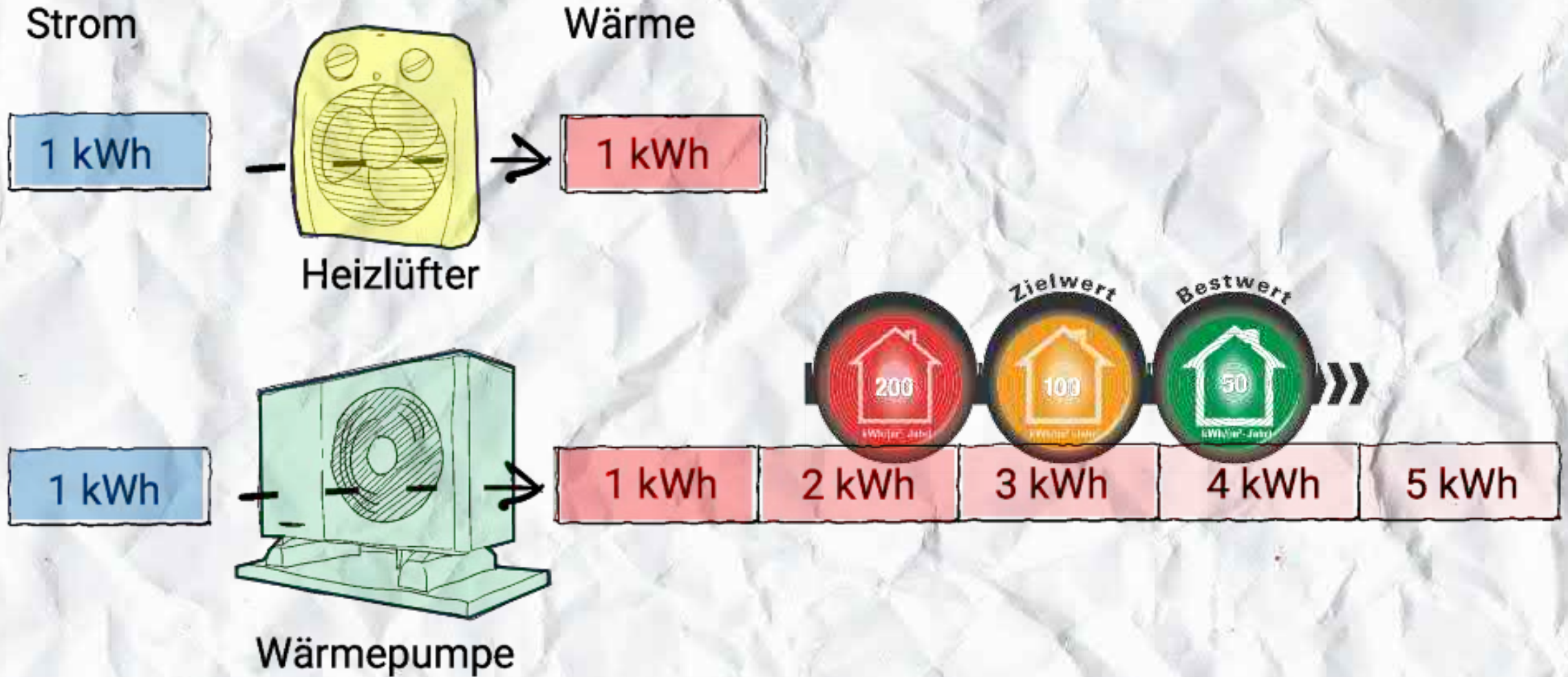


# HEIZUNGS-WÄRMEPUMPE





# WAS IST DAS BESONDERE AN DER WÄRMEPUMPE ?





AUSSENTEMPERATUR  
-10°C

VORLAUFTEMPERATUR  
< 55°C

VORLAUF →

← RÜCHLAUF



VORLAUFTEMPERATUR

< 55°C





**vor  
1978**

**1978  
bis  
1995**

**nach  
1995**

**WÄRMEPUMPE  
MÖGLICH ?**





**vor  
1978**



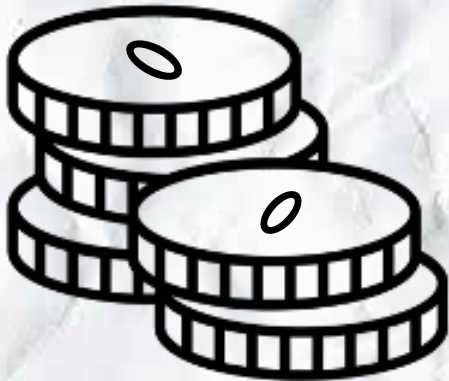


# EINFACHE UND SCHNELLE MASSNAHMEN

An aerial photograph of a town in winter, with snow covering the roofs and ground. Several houses have smoke rising from their chimneys, suggesting a cold day. The text 'EINFACHE UND SCHNELLE MASSNAHMEN' is overlaid in a bold, black, hand-drawn font across the top of the image.

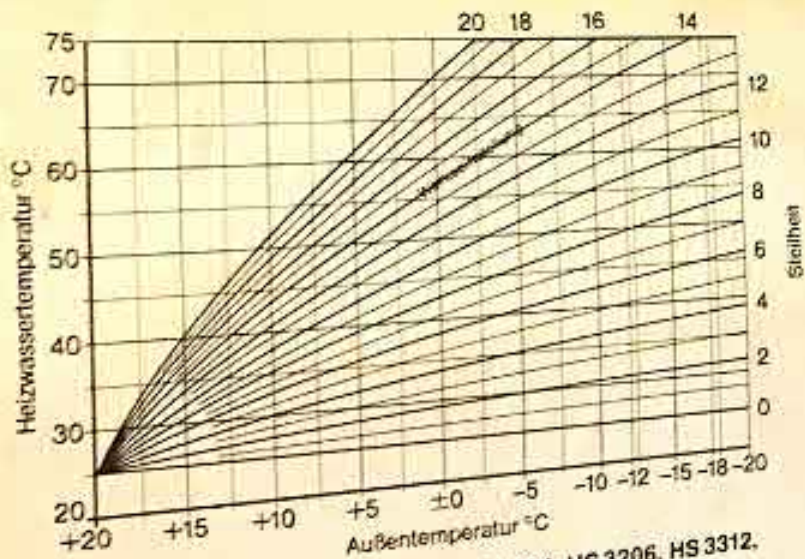


# NULL-EURO MASSNAHMEN





# HEIZUNGSSTEUERUNG OPTIMIEREN



Heizkurven für: HS 3301, HS 3303, HS 3204, HS 3206, HS 3312, HS 3308

Ausgabe: Juni 1987  
Änderungen vorbehalten!

927 643

The control panel features several knobs and buttons. On the left, there are three large knobs for setting different parameters, with scales ranging from 0 to 20 or 30. In the center, there are two smaller knobs, one with a scale from 30 to 80 and a '°C' label. On the right, there is a digital display showing '33.3', an 'AUTO' button with a clock icon, a 'PROG TEST' button, and a row of four function buttons with icons. Below these are 'RESET', 'SET', 'LÖSCHEN', 'SPEICHERN', 'C', and 'E' buttons. At the bottom, there are two indicator lights labeled 'L' and 'Z'.

Vor dem Öffnen Anlage stromlos machen  
Warning - Isolate electrically before removing cover  
Avant d'ouvrir couper le courant Elec





HEIZUNGSSTEUERUNG OPTIMIEREN



**10-EURO**

**MASSNAHMEN**





# STANDBRAUSE



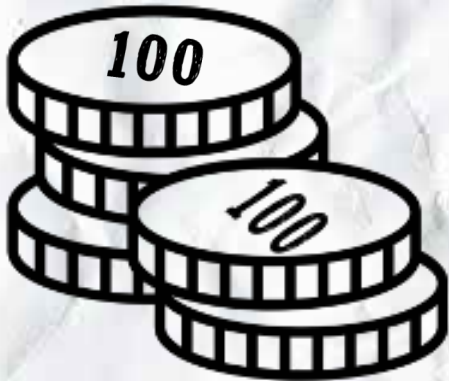
# SPARBRAUSE





**100-EURO**

**MASSNAHMEN**



A narrow, dimly lit staircase with wooden steps and railings, leading up to a wooden roof structure. The walls are made of light-colored, textured material, possibly plaster or concrete, and show signs of wear and discoloration. The lighting is focused on the stairs, creating a strong contrast with the dark shadows.

# DACHBODENZUGÄNGE



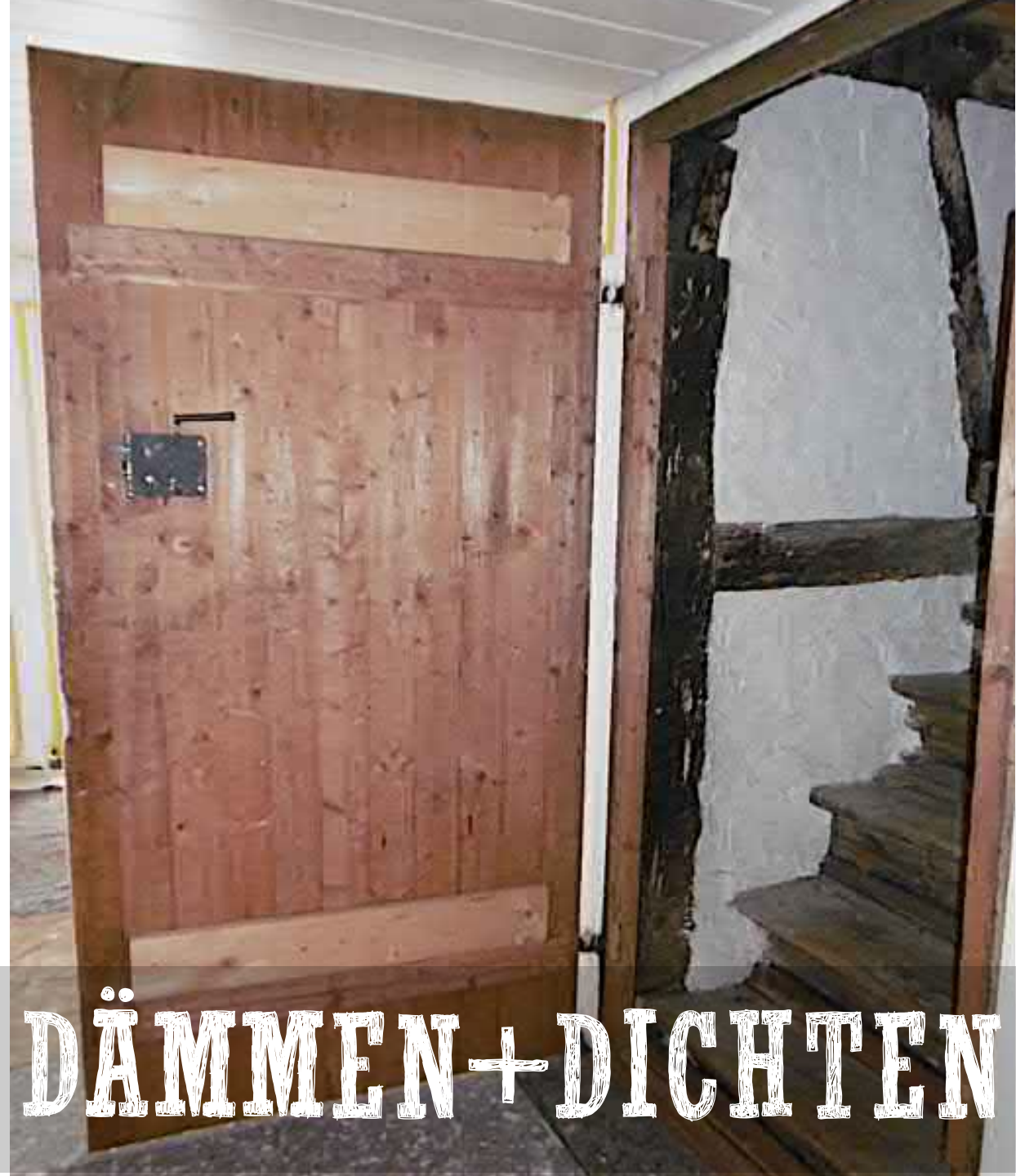
The image shows the interior of an attic. The floor is made of dark wooden planks. A doorway on the left leads to a staircase with wooden steps. To the right, there is a crumpled white bag with a blue stripe and the word 'WÄRMEDÄMMUNG' (insulation) printed on it. The walls are made of light-colored plaster with some visible cracks and a small hole. The lighting is warm, coming from the doorway and a window in the background.

# DACHBODENZUGANG DÄMMEN + DICHTEN





**DACHBODENZUGANG**

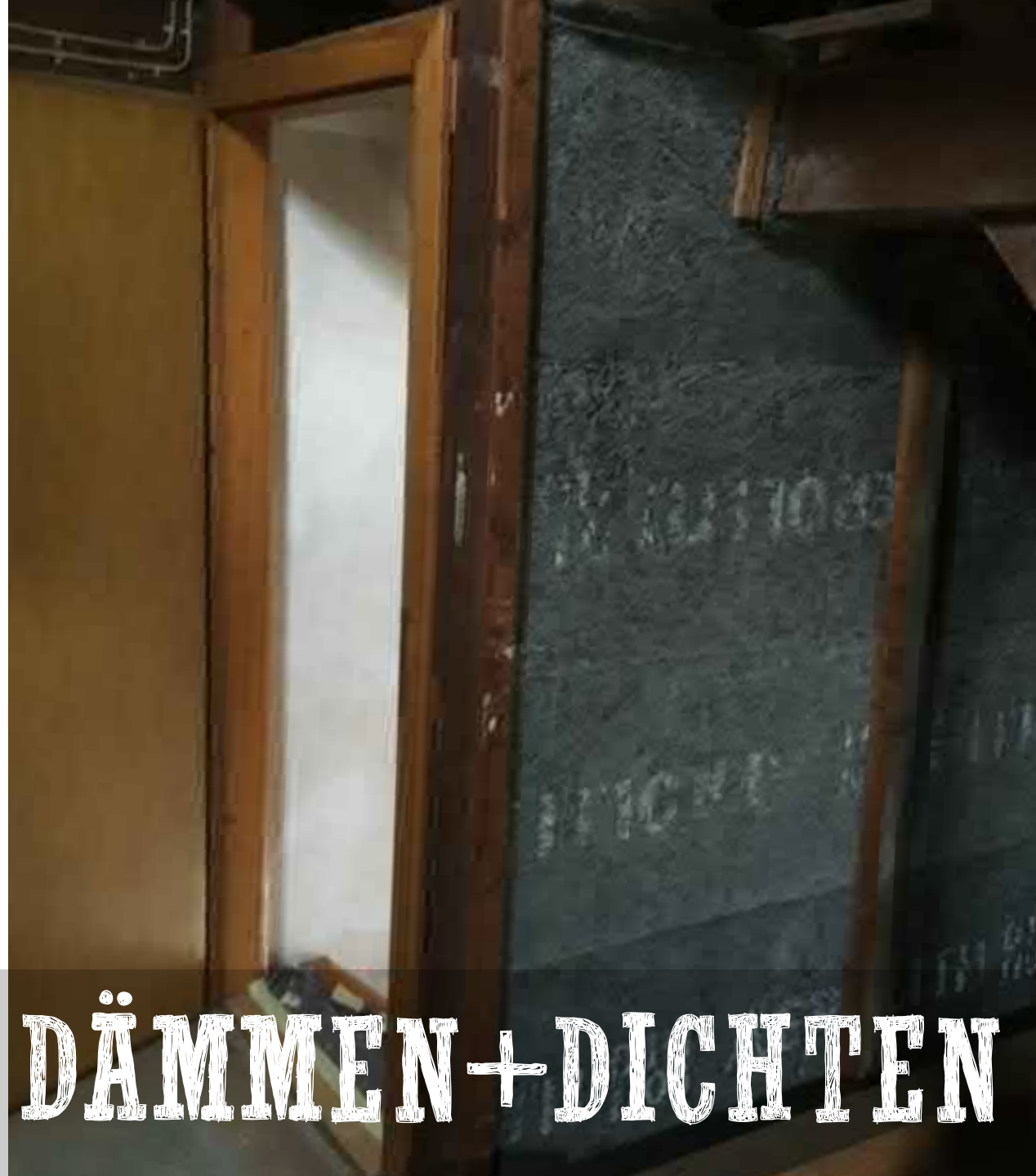


**DÄMMEN + DICHTEN**





**DACHBODENZUGANG**



**DÄMMEN + DICHTEN**

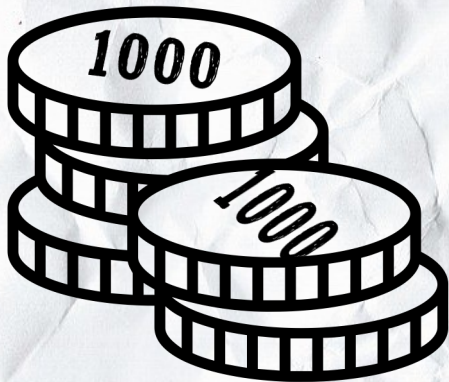


# DACHBODENTREPPE DÄMMEN + DICHTEN



**1.000 - 5.000 EURO**

**MASSNAHMEN**







KALT

OG-DECKEN DÄMMEN



A photograph showing a stack of yellow insulation material (likely mineral wool or glass wool) in a dark, enclosed space. The insulation is stacked in several layers, with some pieces broken and scattered on the floor. A bright light source from the right illuminates the floor and the insulation, creating a strong contrast with the surrounding darkness. The floor appears to be made of concrete or a similar material, with some debris and a small puddle of liquid visible. The walls are dark and textured, possibly wood or concrete.

OG-DECKEN DÄMMEN



# SCHRÄGDÄCHER MIT SPITZBODEN







KALT

SCHRÄGDACH DÄMMEN





**DÄMMEN MIT DÄMMSACK**





**DÄMMEN MIT DÄMMSACK**





**VOR  
1978**

**→ WAS TUN ?**



# HYBRIDHEIZUNG





**Außentemperatur  
in °C**

-15  
-10  
-5  
0  
+5  
+10  
+15  
+20

**Heizleistung  
in %**

100%

50%

30%

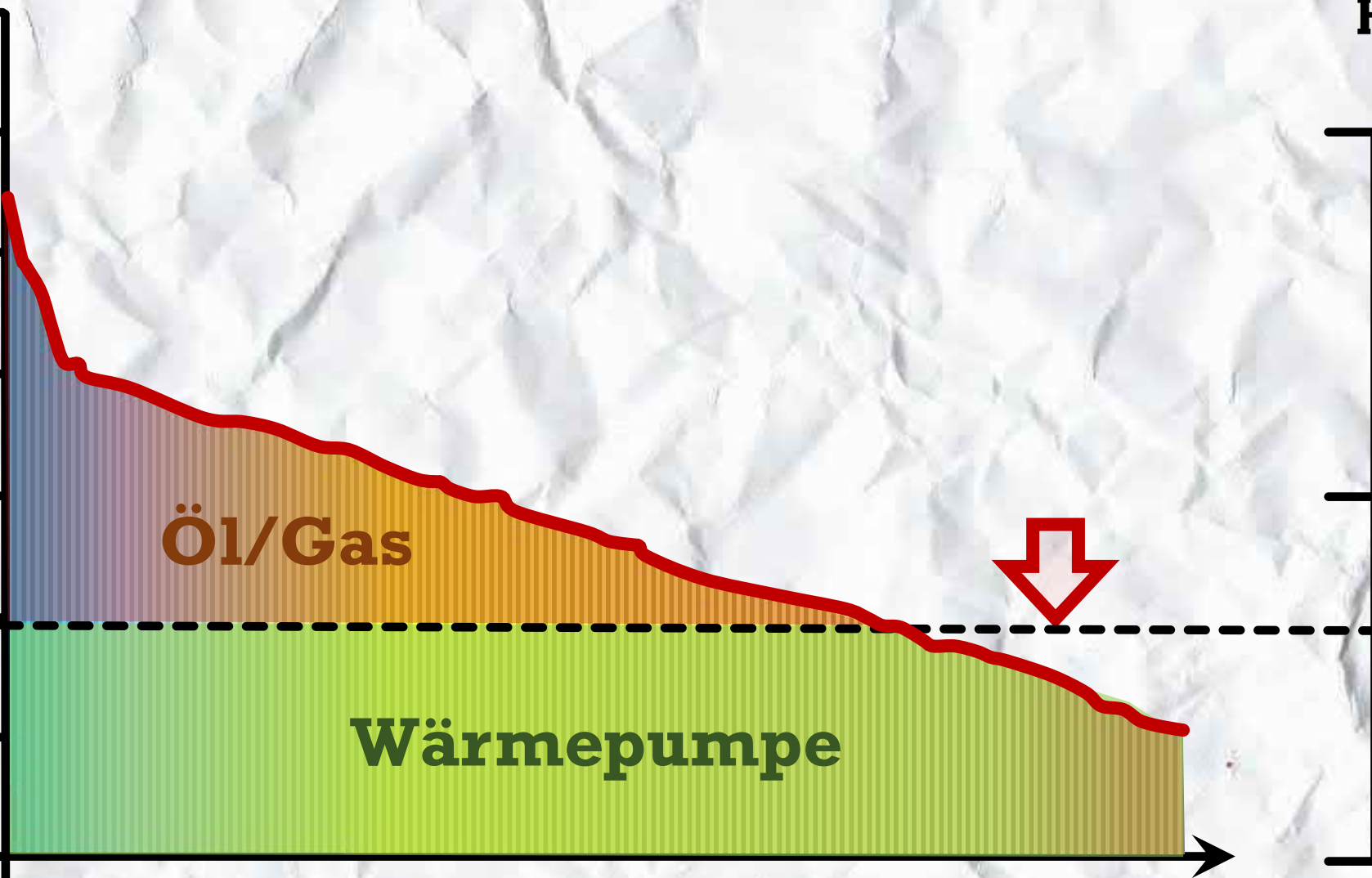
0%

**Öl/Gas**

**Wärmepumpe**



**Heizperiode – ca. 240 Tage nach Außentemperatur sortiert**





# KLIMAPANLAGEN







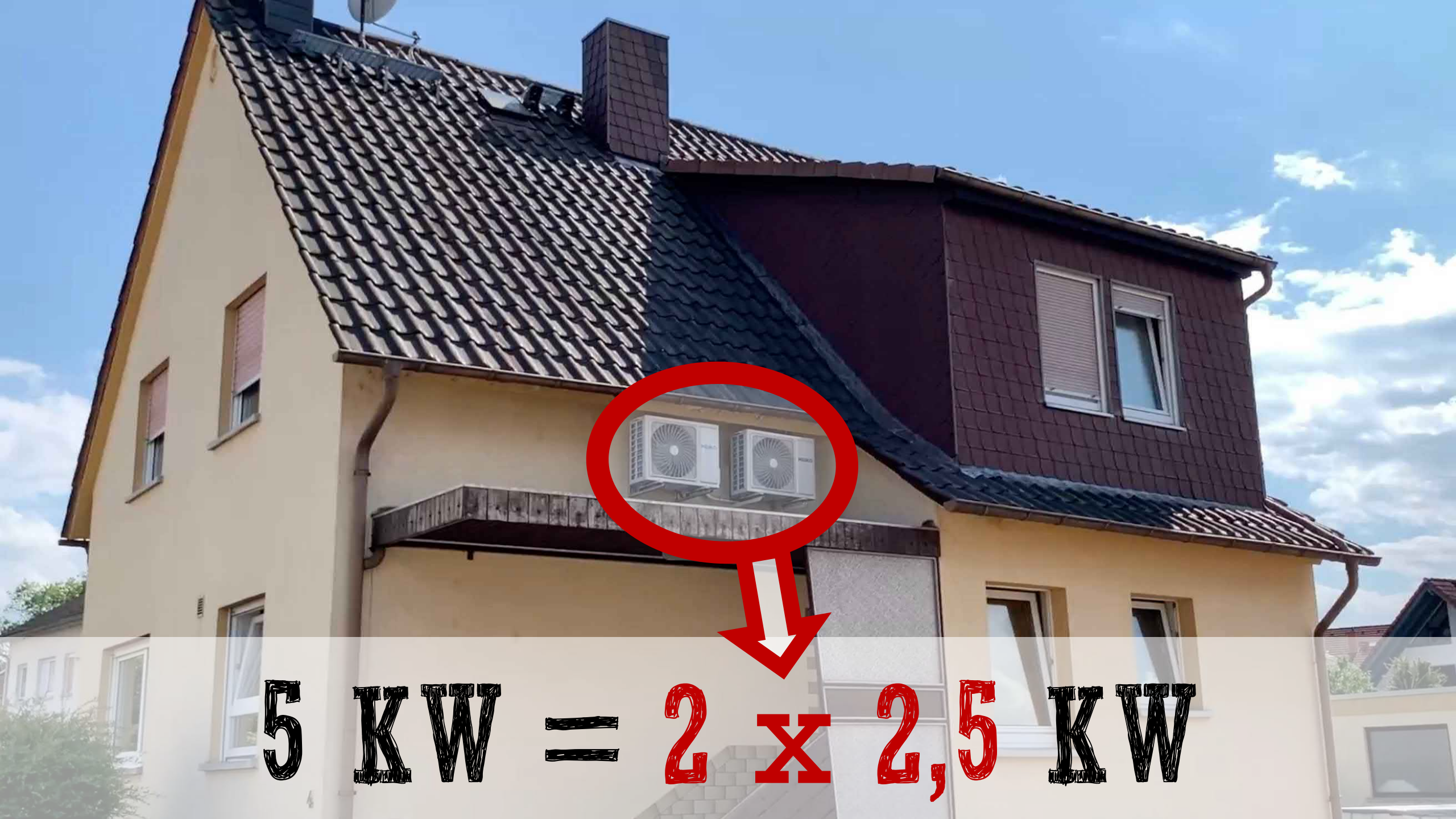
# KLIMANANLAGEN





$$16 \text{ KW} \times 30\% = 5 \text{ KW}$$





**5 KW = 2 x 2,5 KW**





# KLIMANLAGEN



WARMWASSER

WÄRMEPUMPE





Carsten Herbert

ALLES, WAS SIE UBER  
**ENERGIESPAREN**  
WISSEN MÜSSEN

**SPIEGEL**  
Bestseller



Erklärungen  
und Tipps vom  
**ENERGIE  
SPAR  
KOMMISSAR**

**HERDER**





**"DIE BESTE ENERGIE IST DIE,  
DIE WIR  
NICHT VERBRAUCHEN."**







**ENERGIE  
SPAR  
KOMMISSAR**