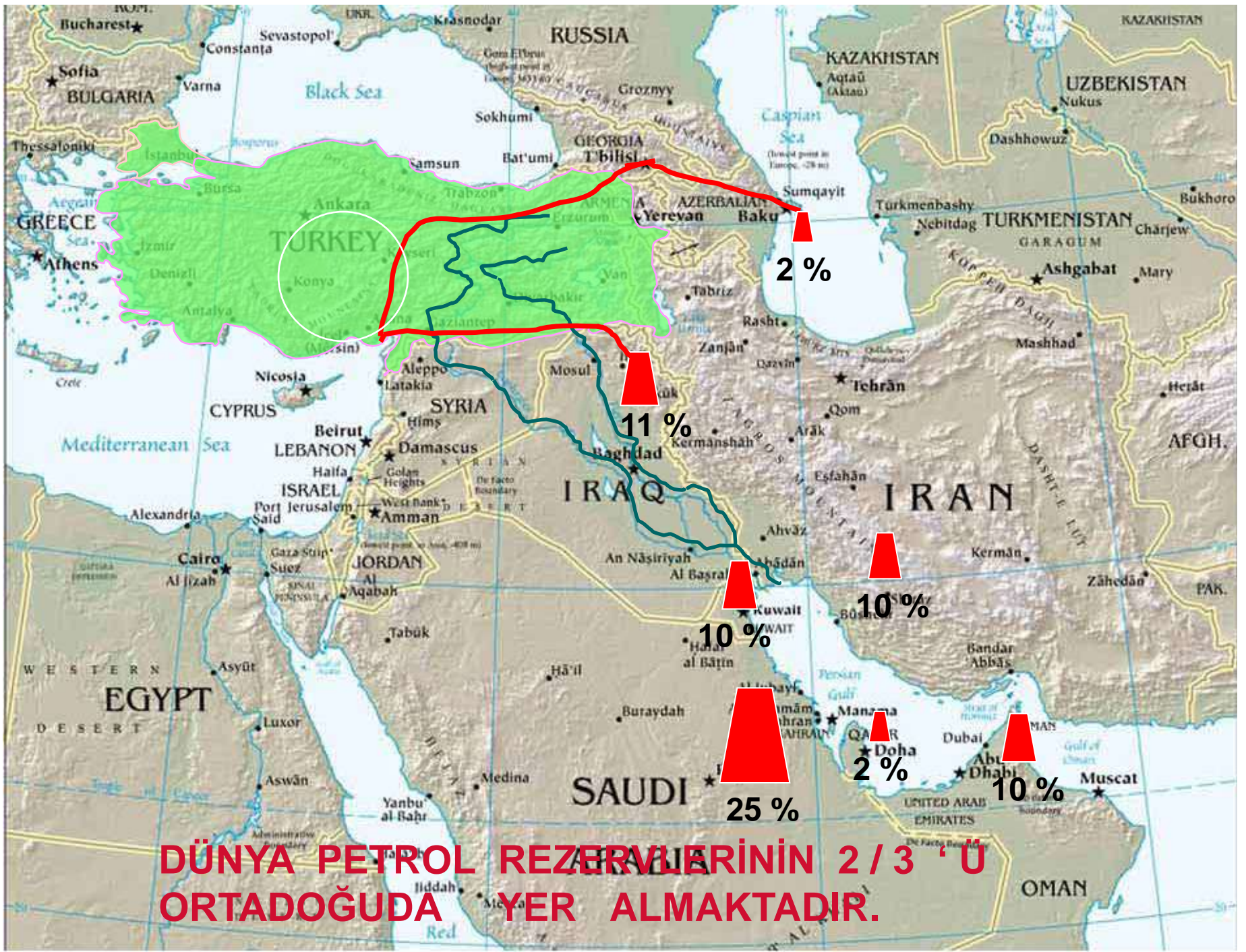


KÜRESEL DEĞERLENDİRMELER IŞIĞINDA TÜRKİYE

Prof. Dr. D. ALİ ERCAN
Nükleer Fizik Uzmanı
Savunma Sanayisi Eski Müsteşarı

15 Kasım 2008, Ankara



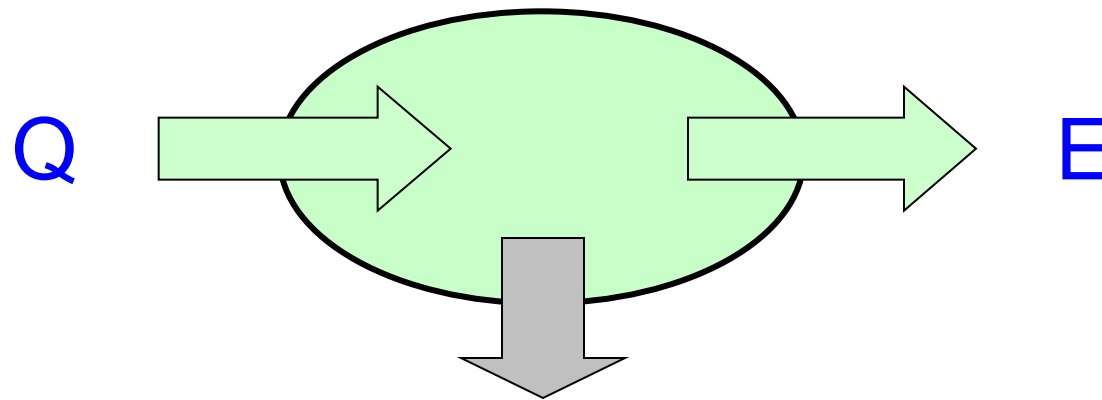
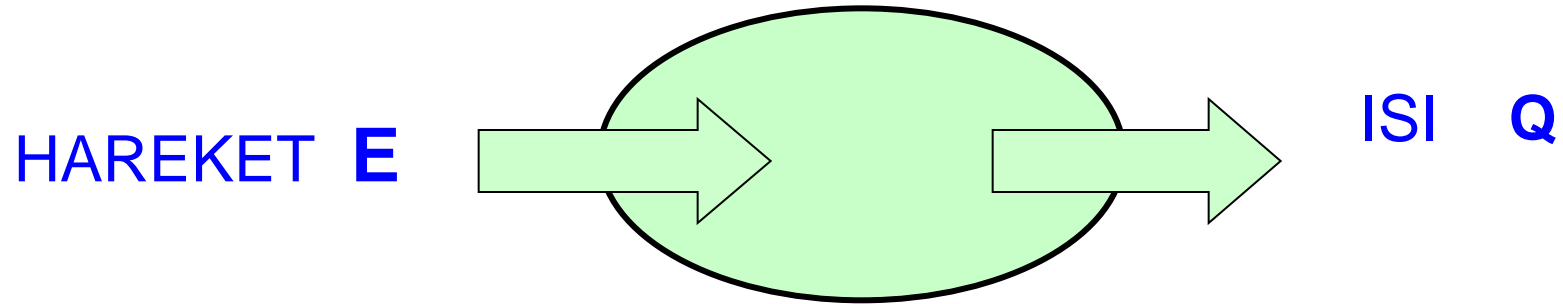
**DÜNYA PETROL REZERVLERİNİN 2/3 ' Ü
ORTADOĞUDA YER ALMAKTADIR.**

ENERJİ KAYNAKLARI*

		<u>DÜNYA</u>	<u>TÜRKİYE</u>
KÖMÜR	(10⁹ TON)	520	1,43
LİNYİT	(10⁹ TON)	520	7,34
PETROL	(10⁹ TON)	140	0,036
D.GAZ	(10¹² m³)	140	0,008
URANYUM	(10³ TON)	3600	9,1
TOPLAM	(PW_eh)	3000	6

* 1995

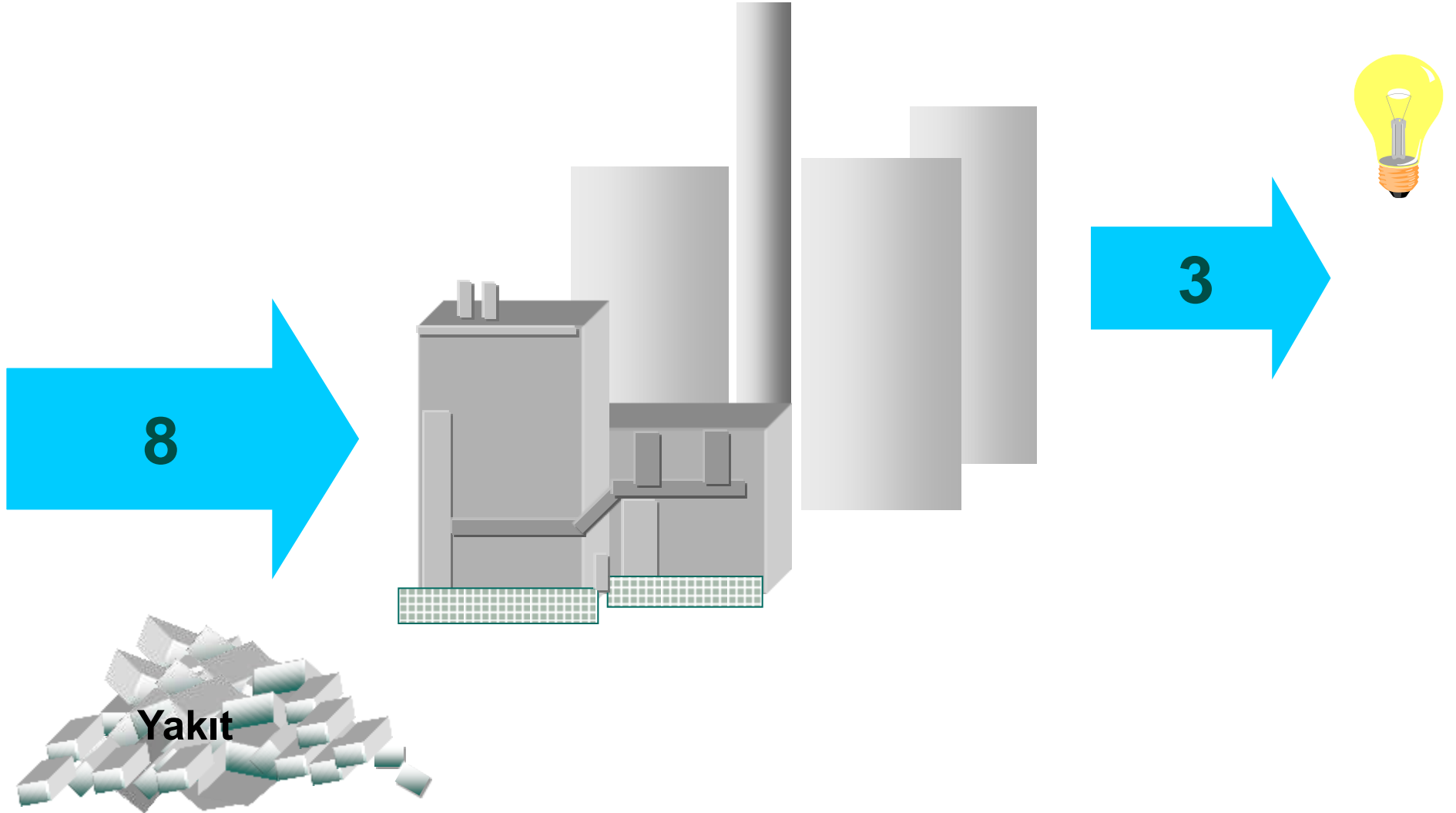
ENERJİ - ENTROPİ



Verim

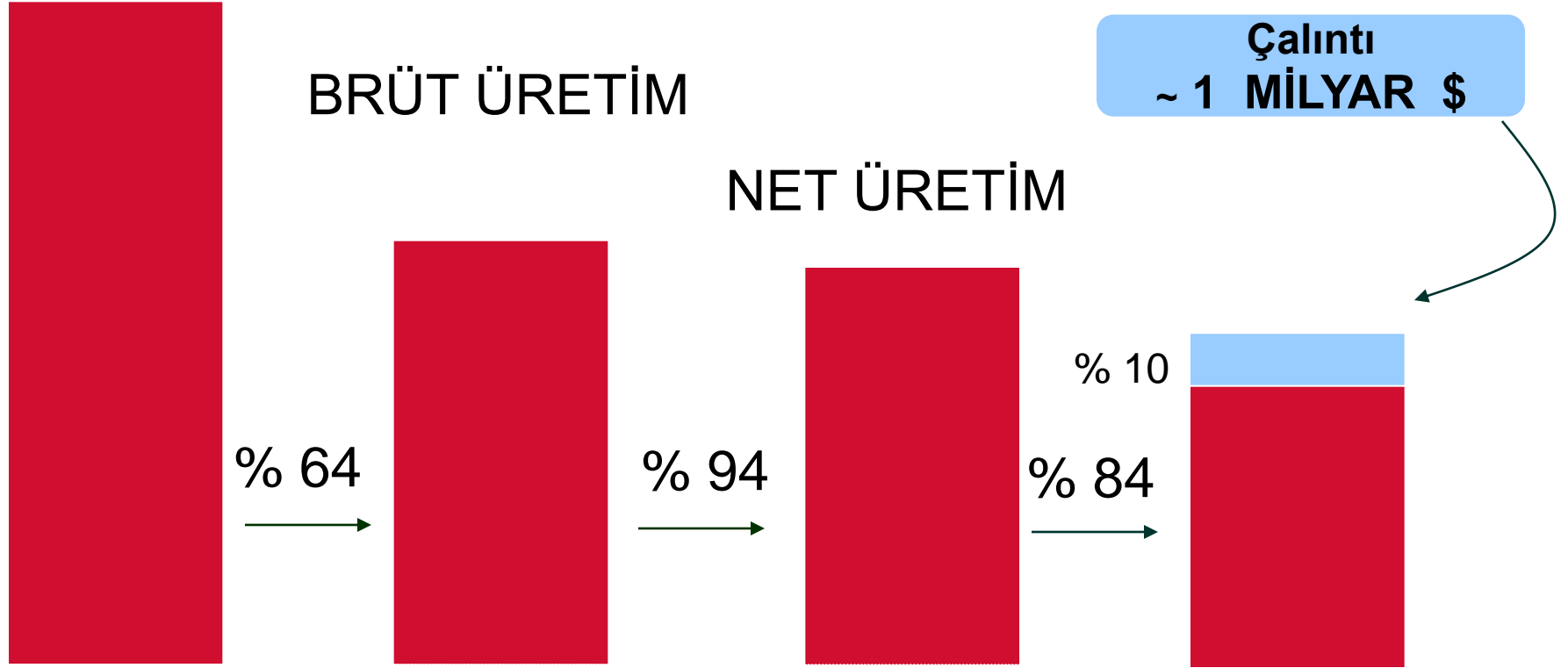
$$\eta = E / Q < 1$$

ENERJİ [TÜKETİM] SANTRALLARI

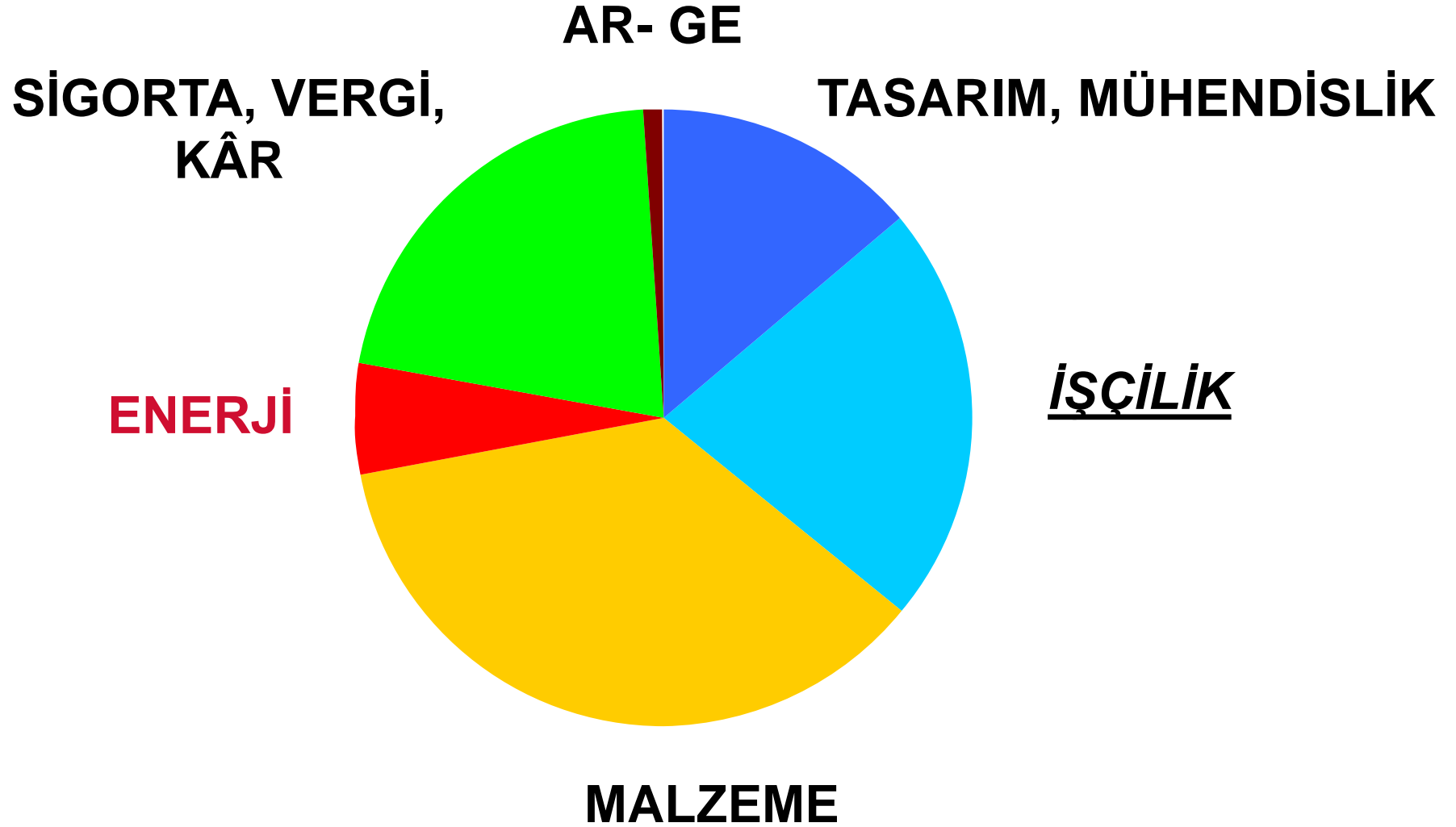


TÜRKİYE'DE ELEKTRİK ENERJİSİ

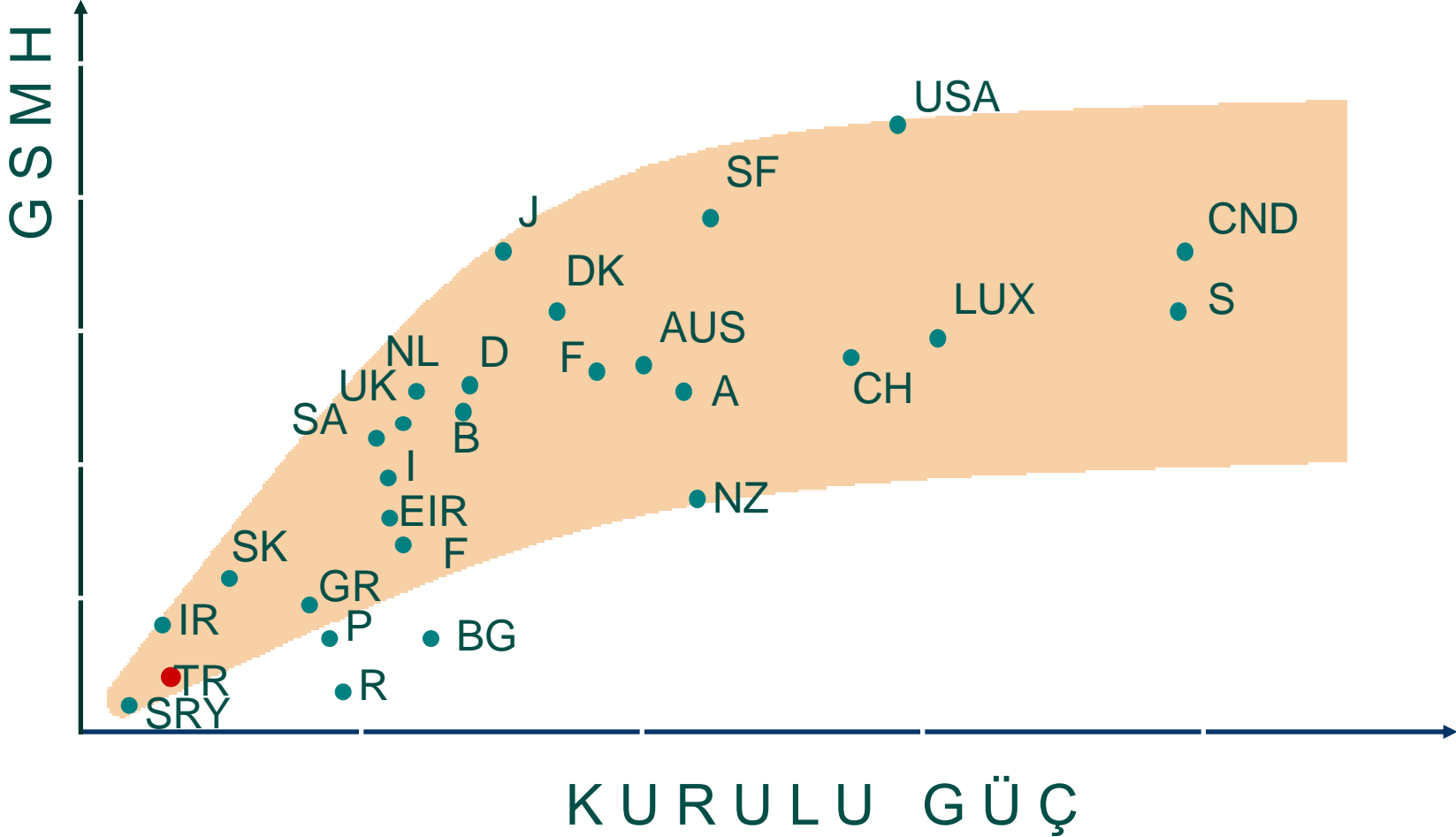
KURULU GÜÇ (42 GW)



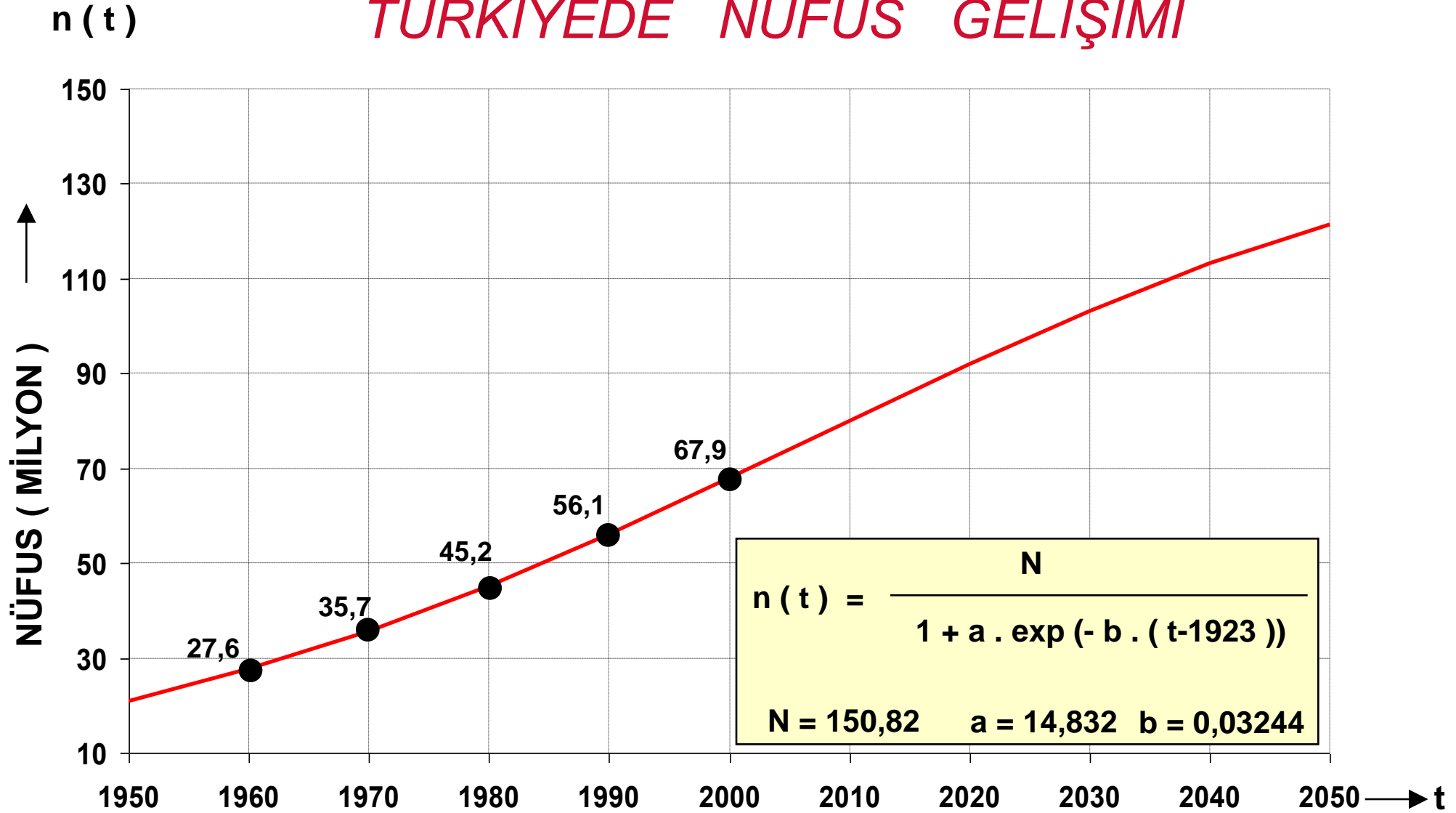
TÜRK SANAYİSİNDE ÜRÜNE KATKI PAYLARI



GSMH / KURULU GÜÇ

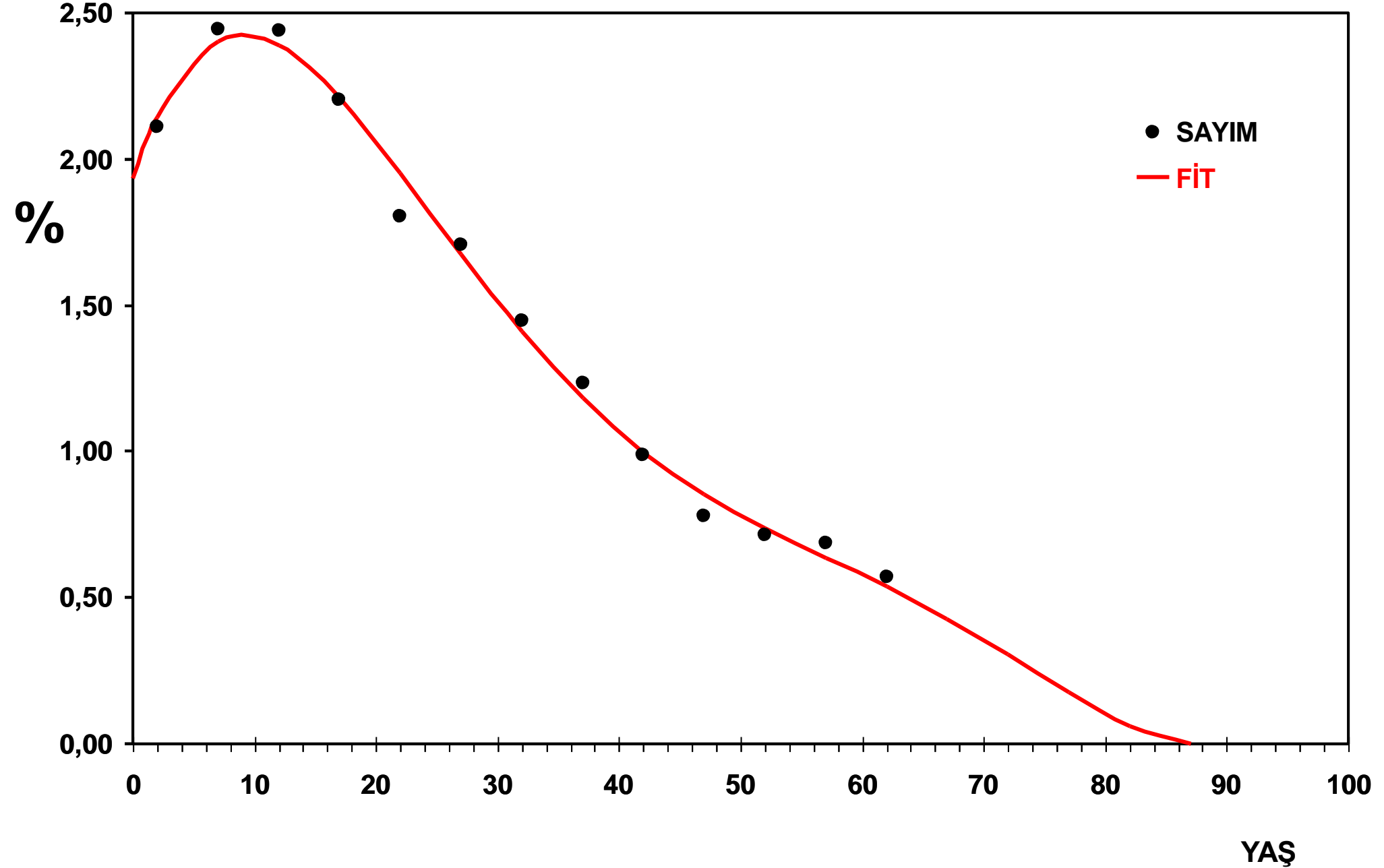


TÜRKİYEDE NÜFUS GELİŞİMİ



TÜRKİYE'DE 1990 YAŞ DAĞILIMI

Æ



(*) DEVLET İSTATİSTİK ENSTİTÜSÜ 1993 VERİLERİ

NÜFUS HAREKETİ *

DOĞUM 4,7 / dak

ÖLÜM 2,4 / dak

ARTIŞ 2,3 / dak

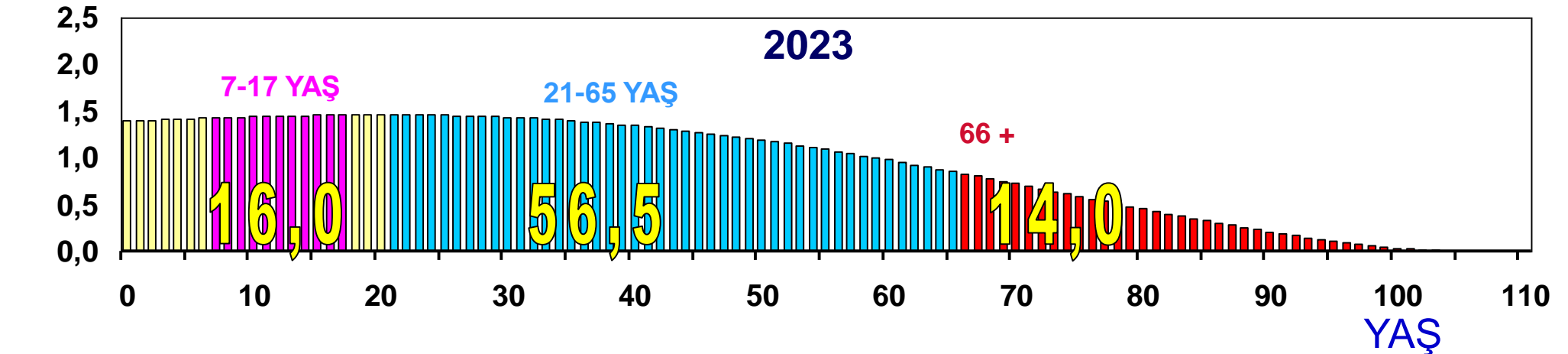
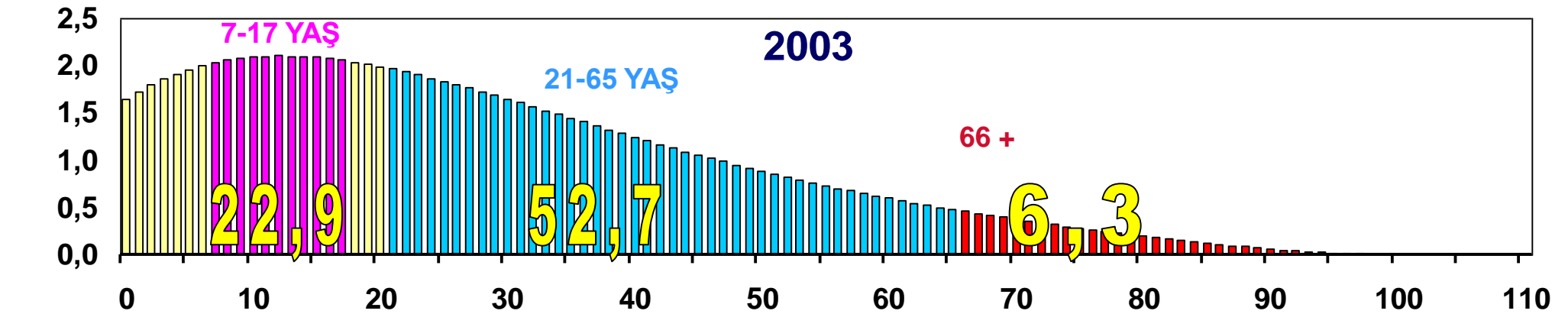
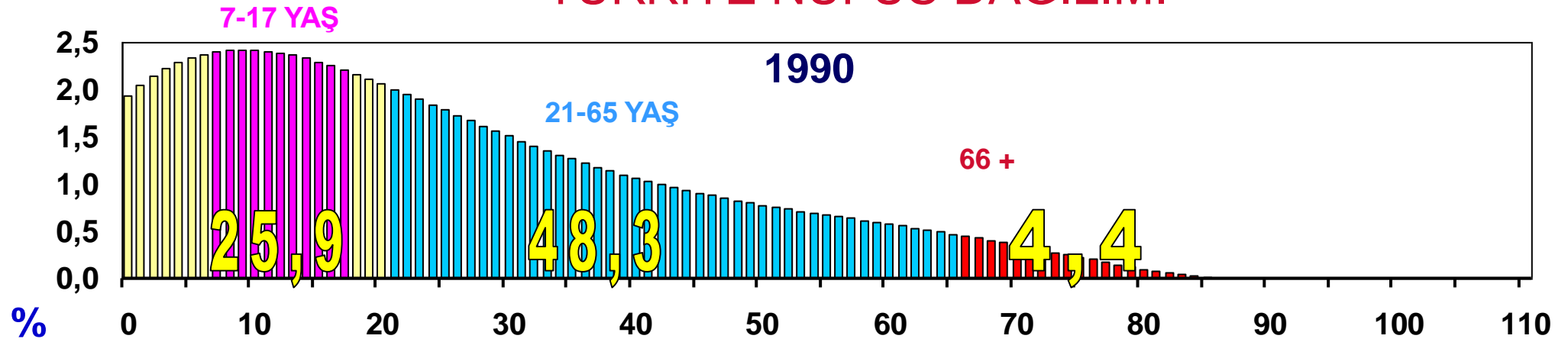
GEREKSİZ ÖLÜM / DOĞUM ~ 2 MİLYON

MALİYETİ ~ 10 MİLYAR \$ / YIL

*) SON 5 YILIN ORTALAMASI NÜFUS İD.GN.MD. 2003 VERİLERİNDEN DAKİKADA ÖLÜM & DOĞUM ADEDİ

**) İŞ GÜCÜ KAYBI, VS... ~ 50 ADAM.GÜN + 500 \$ ~ 5000 \$

TÜRKİYE NÜFUS DAĞILIMI



DÜNYA

TÜRKİYE

NÜFUS

1000

11

TOPRAK, SU

1000

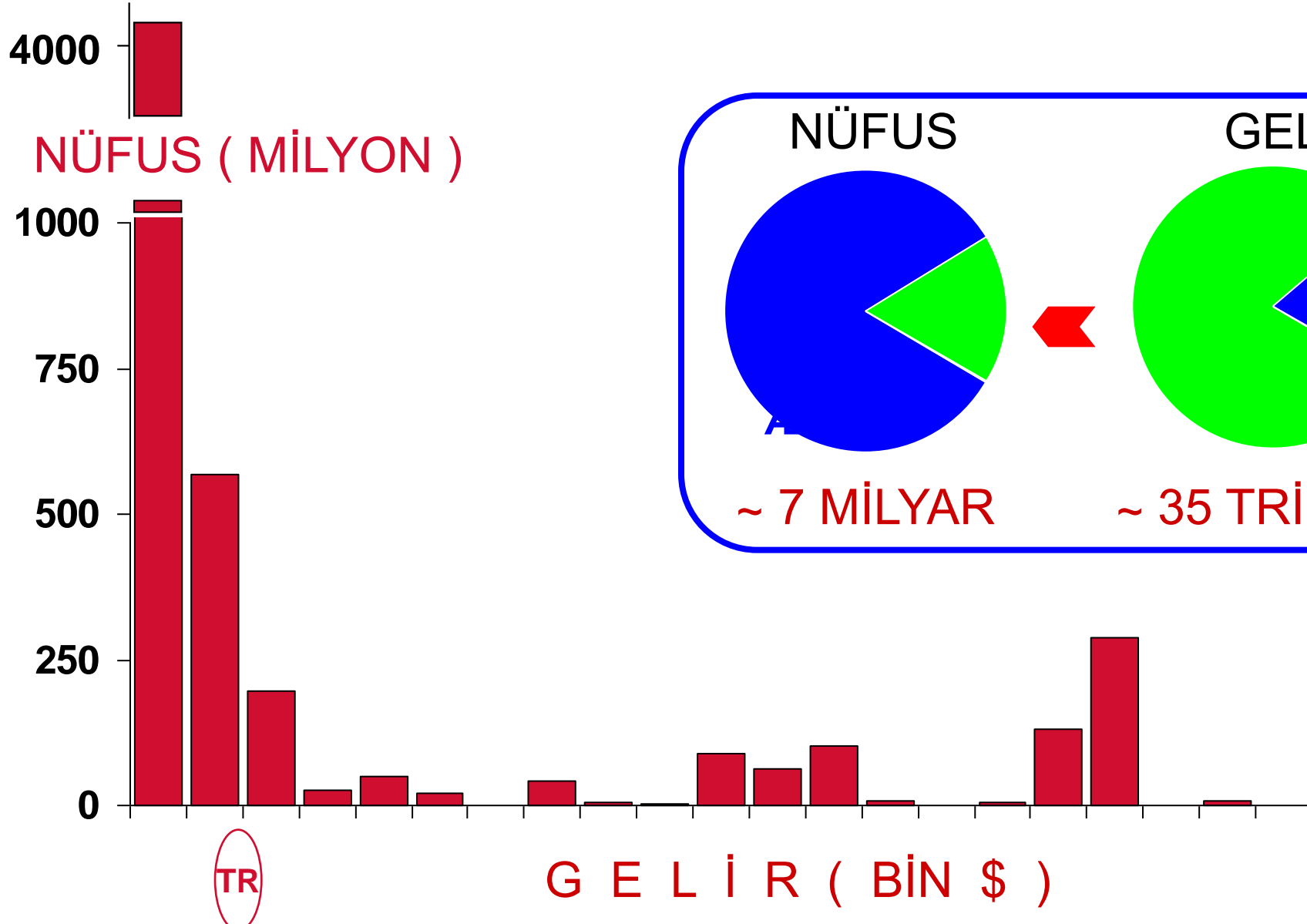
6

ENERJİ

1000

2

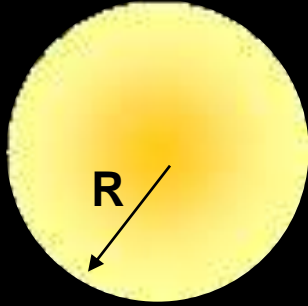
DÜNYA NÜFUS / GELİR DAĞILIMI



GÜNEŞ ENERJİSİ

GÜNEŞ

$T = 5785^\circ \text{ K}$



DÜNYA

$r = 6371 \text{ km}$

$\sim 215 R$

$$\dot{E} = \sigma T^4 \pi r^2 / 215^2 = 1,75 \times 10^{17} \text{ W}$$

\mathcal{A}

$$G = 5,52 \times 10^{24} \text{ J/y} \times 2,78 \times 10^{-7} \text{ kWh/J} \times (1/2 \times 1/5 \times 1/40) \times 0,01 \text{ \$/kWh} = 38,4 \times 10^{12} \text{ \$}$$

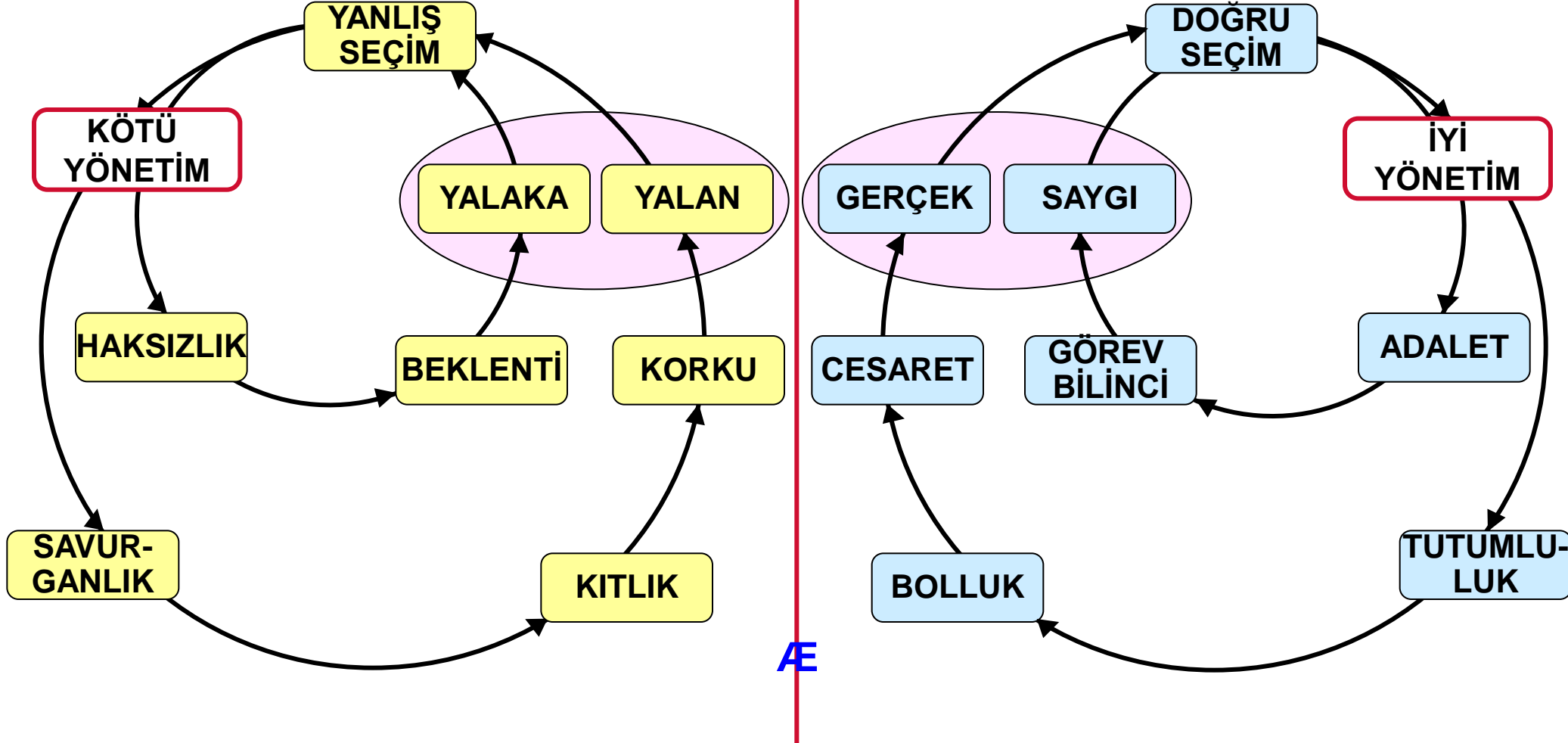
$$G \approx 40 \text{ TRİLYON \$} \approx \Sigma (\text{GNP})_i$$

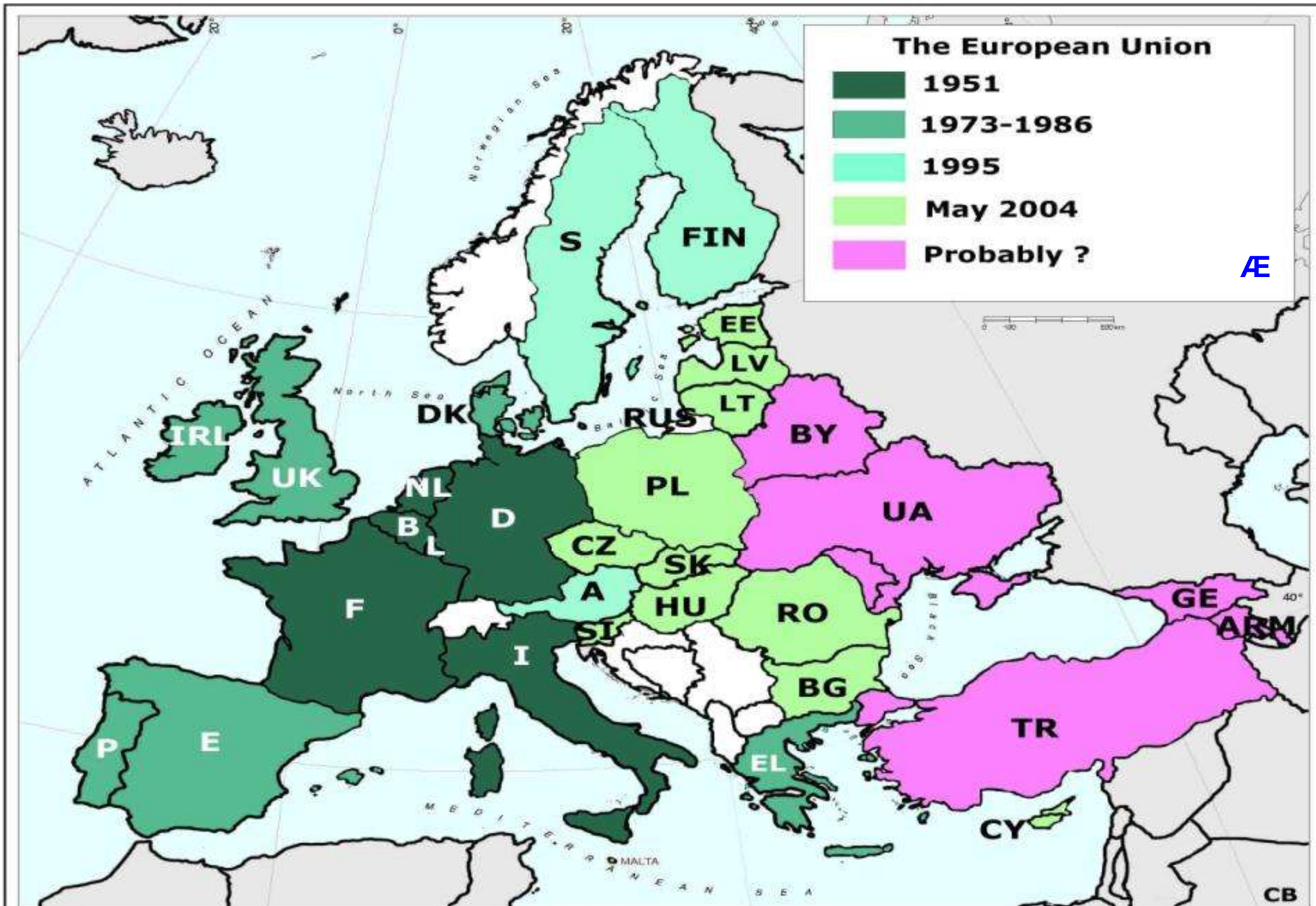
TÜM DÜNYA ÜLKELERİNİN GSMH TOPLAMI ~ 35 TRİLYON \$ (5000 \$/adam)

SOSYO-EKONOMİK KISIR DÖNGÜ

GERİYE SARMAL

İLERİYE SARMAL

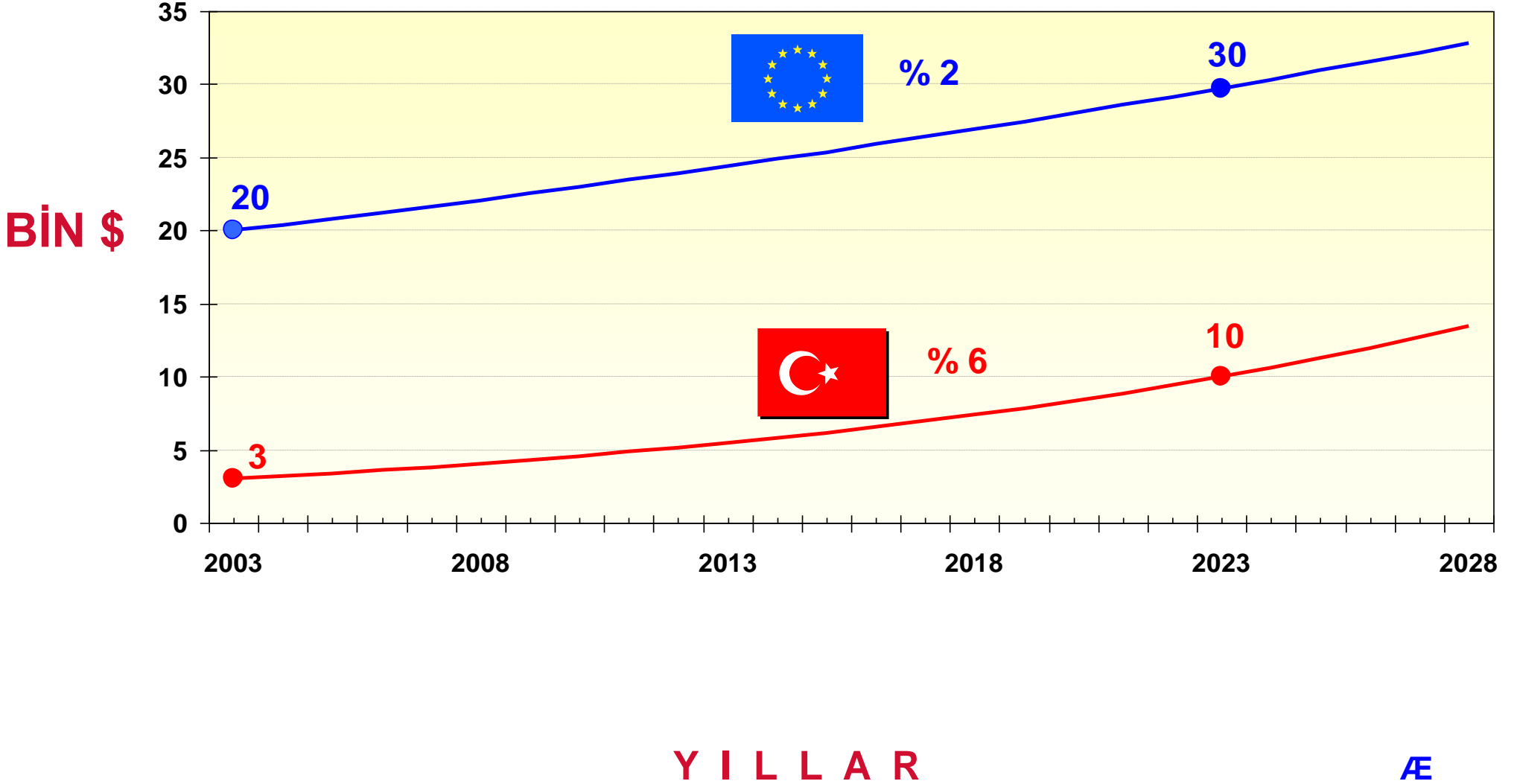




Æ

CB

KİŞİ BAŞINA GELİR (GSMH / NÜFUS)





***TÜRKİYE
TÜRKLERİNDİR***