



TRANE®

**Santrifüj Kompresörlü
Cihazlarda Yeni Nesil Gazlar**



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İklim Değişikliği Regülasyonu



Kyoto Protocol (1997)



Paris Accord (2016)

Özellikle kimyasal ürünlerden kaynaklanan atklara odaklandı.

Ozon Koruma Regülasyonu



Montreal Protocol (1987)



Kigali Agreement (2016)

Özellikle florokarbonlara
CFCs, HCFCs and HFCs

Regülasyon farklılıklarını anlamak.



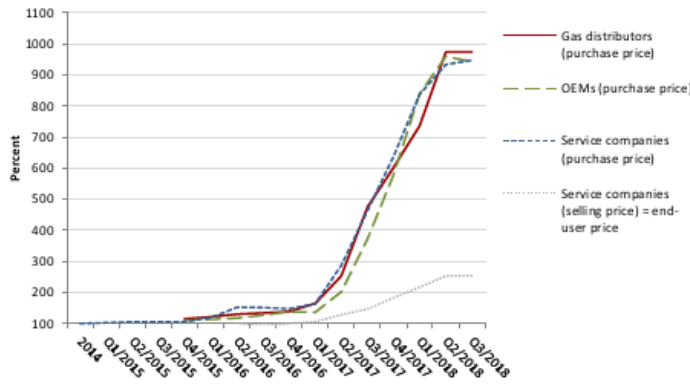
Excerpt for participants:
Monitoring of refrigerant prices against the background of Regulation (EU) No 517/2014

Q3/2018 – January 2019

In Q3/2018, 60 companies and associations from different EU Member States and all supply chain levels voluntarily reported prices for R404A, R410A, R407C and R134a and alternatives. Please note that companies do not report prices for all refrigerants but only for the ones relevant to them.

Along the supply chain

Figure 1 shows the development of purchase prices of R410A (GWP 2088) at different levels of the supply chain. Data presented include prices reported by two gas distributors, 23 OEMs and 25 service companies. Prices are indexed to the baseline year 2014 (= 100 %).



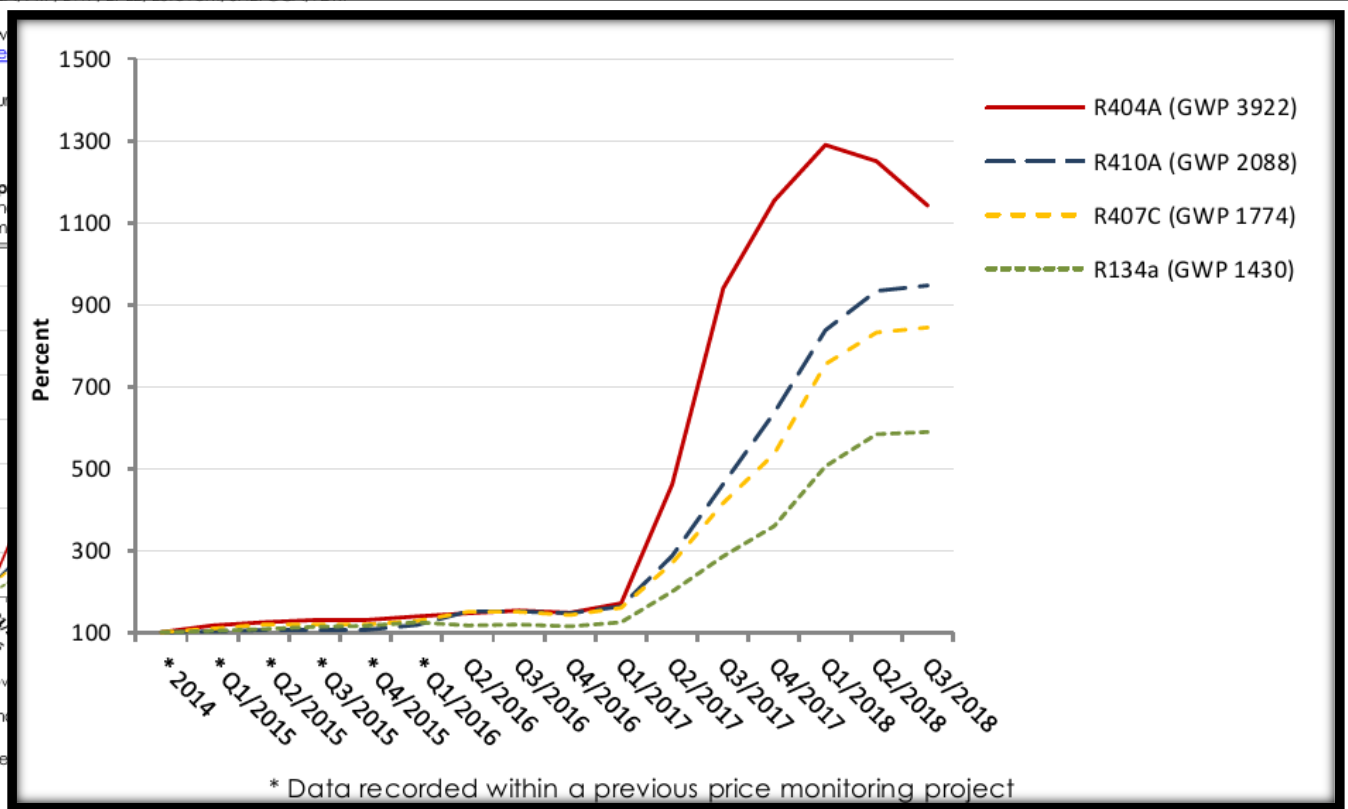
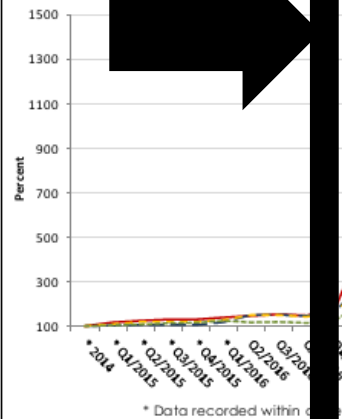
Other findings for Q3/2018:

- Demand for refrigerants was said to be low. Reasons given encompassed stockpiling in previous quarters, increased care in technologies and possible illegal trade in refrigerants in Southern and Eastern European countries.
- Prices of R404A again dropped. Companies indicated that large R404A quantities were available on the market, due to quantities supplied at low prices and reclaimed quantities.
- Prices of R410A and R134a slightly fell or remained unchanged after both had seen significant price rises since mid-2017.
- Purchase and selling prices of alternatives with lower GWP remained fairly stable or slightly dropped.
- Prices for quota authorisations ranged from 25 to 40 €/t CO₂e.
- As indicated by some companies, prices of refrigerants presumed to be illegally imported showed a large price difference to quoted refrigerants (at least 50 % cheaper).



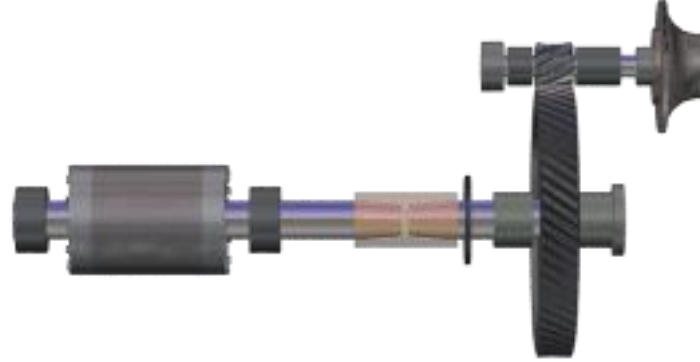
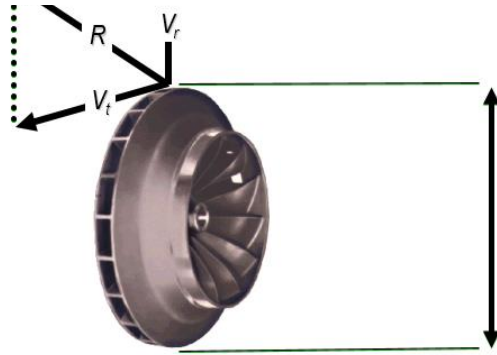
At service company level

Figure 2 displays the trend of purchase prices of HFC refrigerants. Data presented include prices reported by companies from Estonia, France, Germany and the Netherlands. Prices are indexed to the baseline year 2014 (= 100 %).



* Data recorded within a previous price monitoring project

Santrifüj Komresörlü Cihazlarda Gaz Alternatifleri



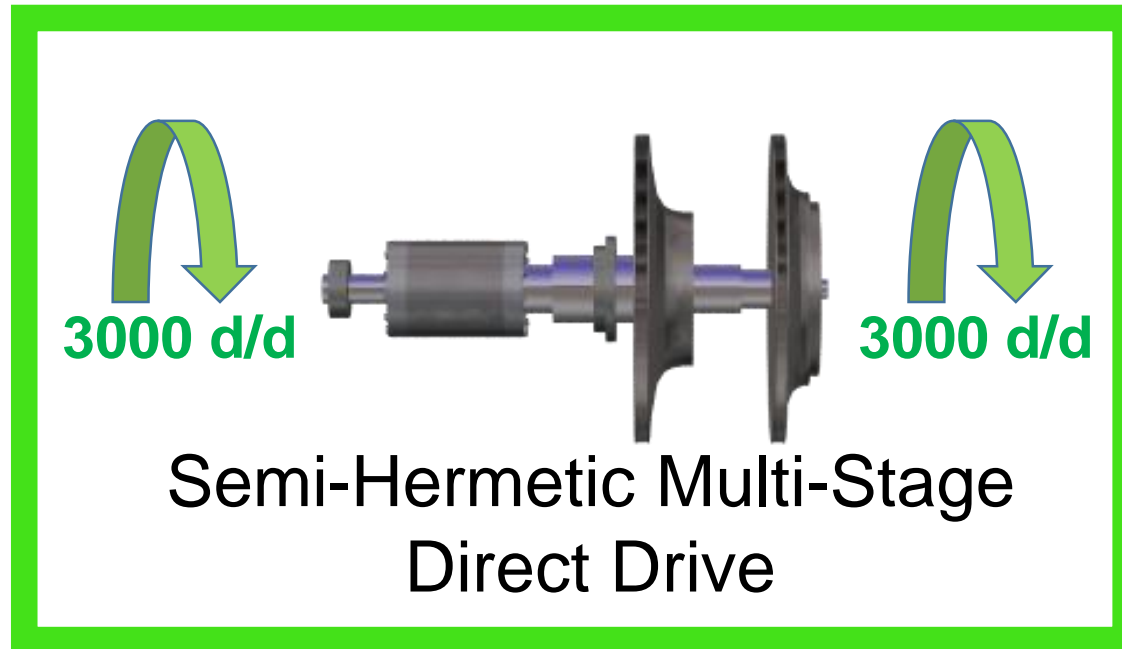
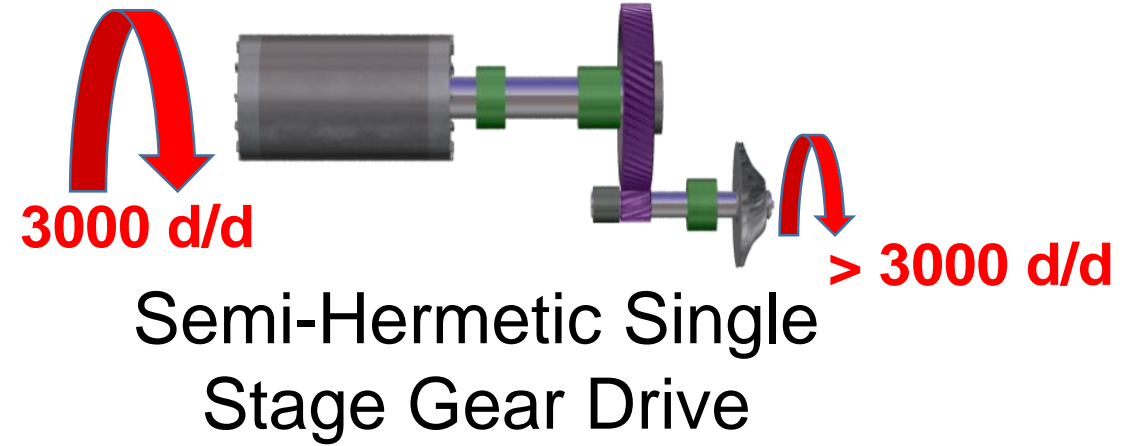
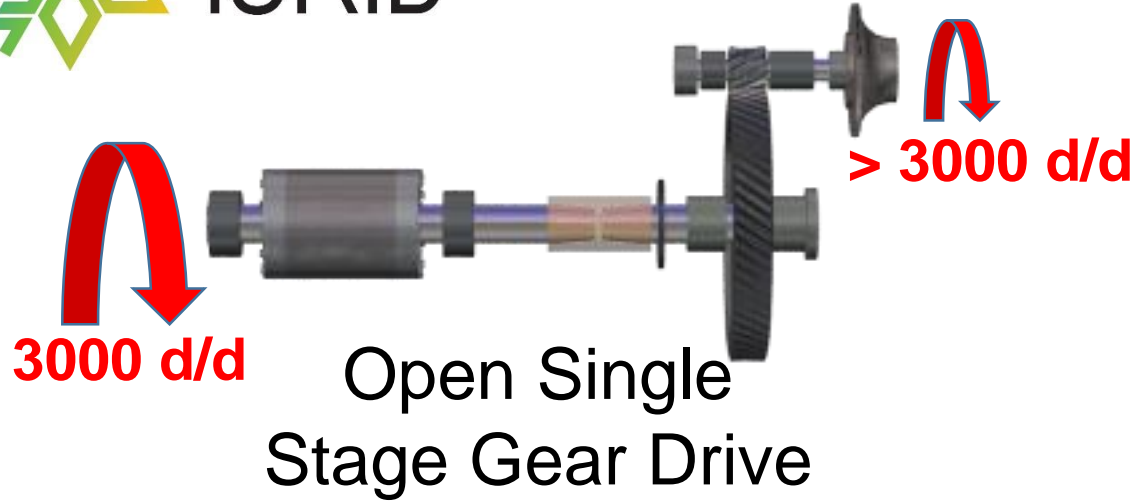
Su Soğutmalı 1.500 kW – 14.000 kW

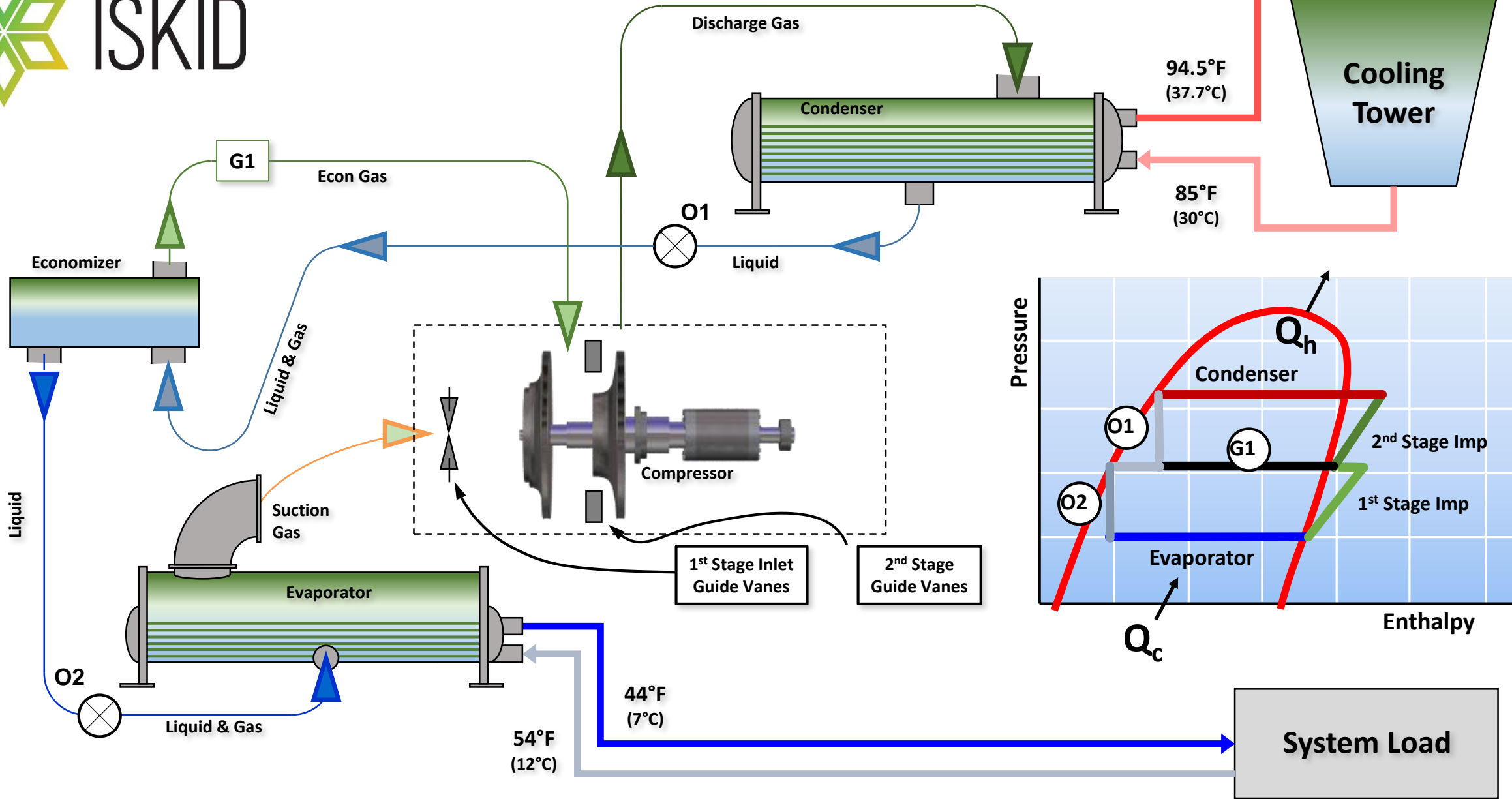
	R134A	R514A	R1233ZD
KIP (GWP)	1300	2	1
VERİMLİLİK (COP)	8.47	8.91	8.85
ATMOSFERİK OMUR	13.4 YIL	22 GÜN	26 GÜN
YANICILIK SINIFI (ASHRAE)	1	1	1
TOKSİKLİK SINIFI (ASHRAE - OEL)	A 1000 ppm	B 320 ppm	A 800 ppm





Santrifüj Komresörlü Cihazlarda Gaz Alternatifleri





Yeni nesil gaz kullanılması sayesinde yapılan
Karbon Salınım Tasarrufu

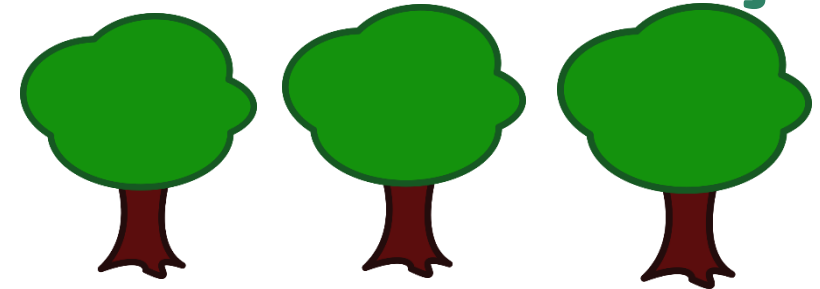
= 1000 kg gaz x 1400 GWP (R134A)

1.400 ton

1.400 adet ARABA



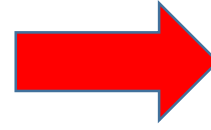
4.200 adet AĞAÇ



Firmamızın tedarik ettiği ürünler ile

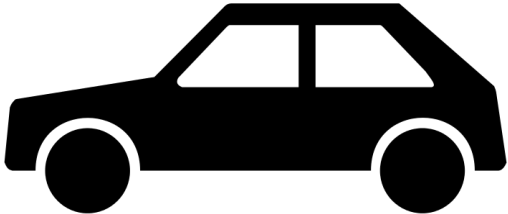
Yeni Nesil Gaz Kullanılması Sayesinde Yapılan Karbon Salınım Tasarrufu

**TOPLAM 40.000 kW
Soğutma Gücü**

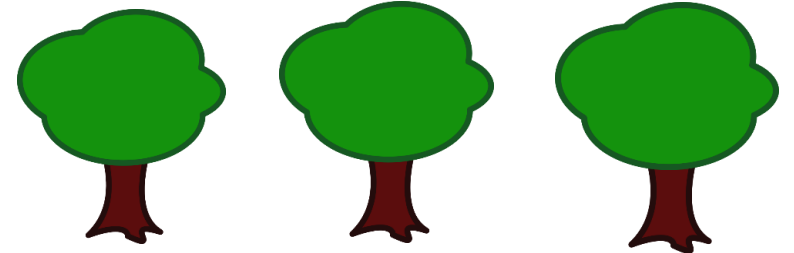


8.000 kg Soğutucu Gaz

11.200 adet ARABA



33.600 adet AĞAÇ





TEŞEKKÜRLER