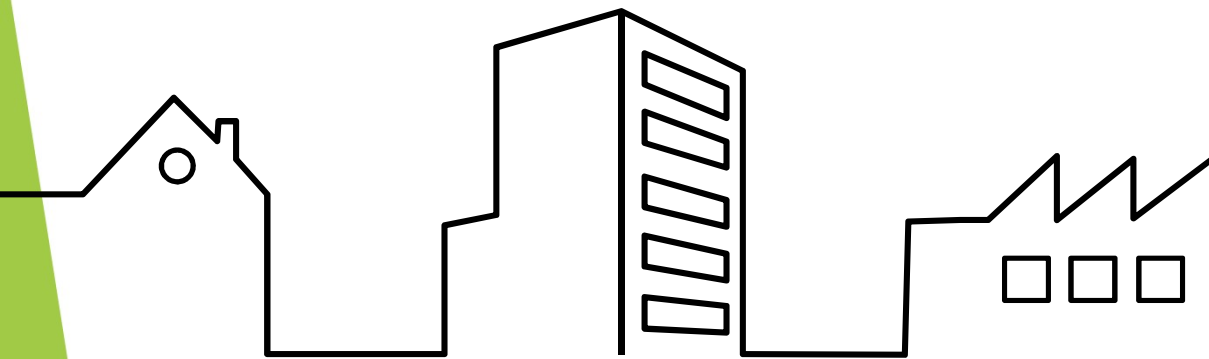


Recikliranje i ilegalna prodaja rashladnih medija



Sarajevo, 09/10.07.2019.

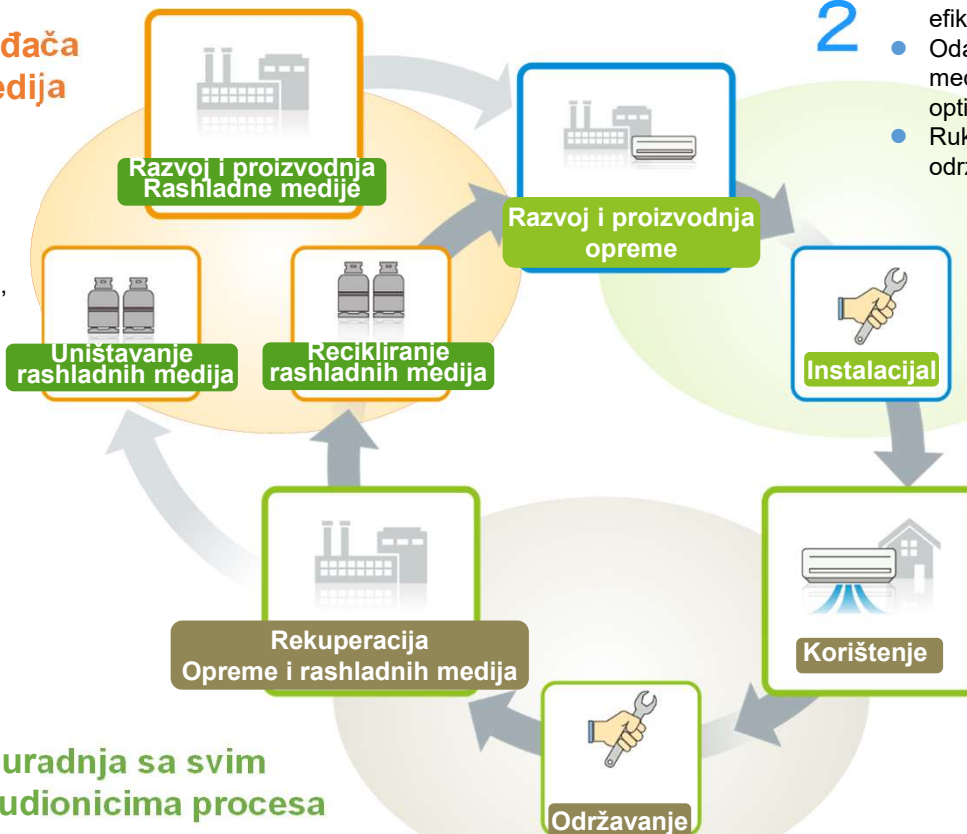
Hrvoje Krapanić, dipl. ing. strojarstva

Daikin Airconditioning Central Europe GmbH

Uloga proizvođača u ostvarenju održivog životnog ciklusa rashladnih medija i opreme

1 Uloga proizvođača rashladnih medija

- Razvijati rashladne medije za raznoliku primjenu
- Ciljati na **održivost** industrije klimatizacije, grijanja i rashladne tehnike



3 Suradnja sa svim sudionicima procesa

- Raditi na unapređenju industrije klimatizacije, grijanja i rashladne tehnike kako bi čim više bila **održiva**

Uloga proizvođača opreme

2

- Povećavati energetske efikasnosti opreme i sustava
- Odabirati optimalne rashladne medije za postizanje optimalnih rezultata
- Rukovoditi se principom održivosti

Uloga proizvođača u ostvarenju održivog životnog ciklusa rashladnih medija i opreme

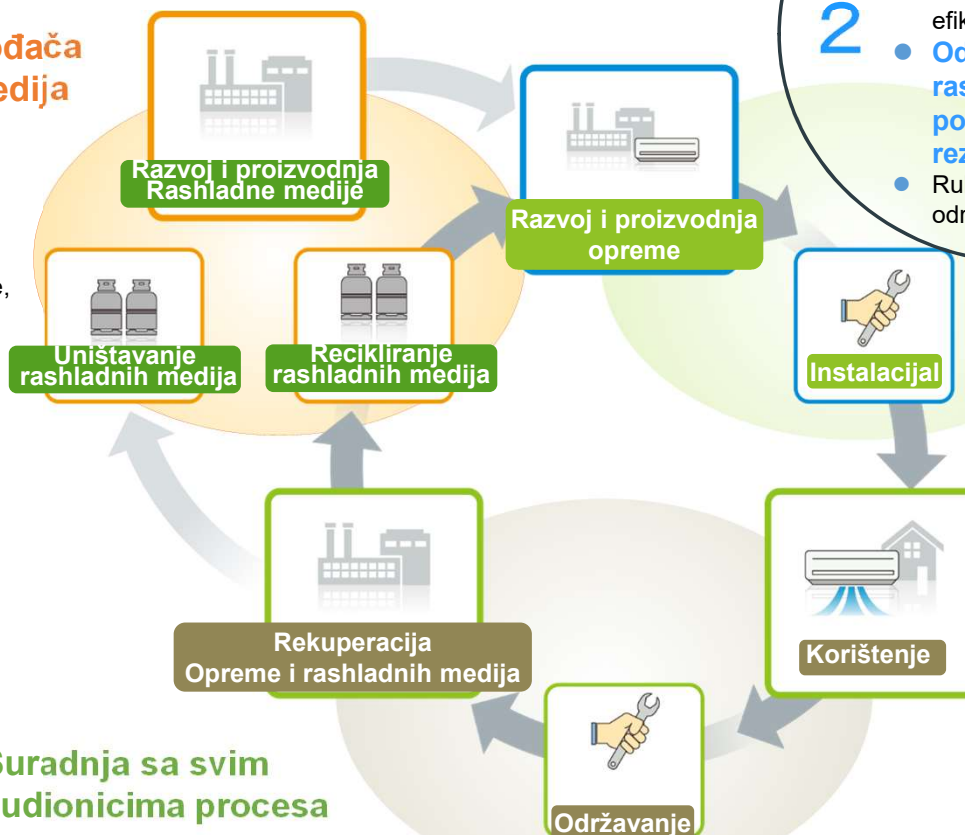
1 Uloga proizvođača rashladnih medija

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Uloga proizvođača opreme

2

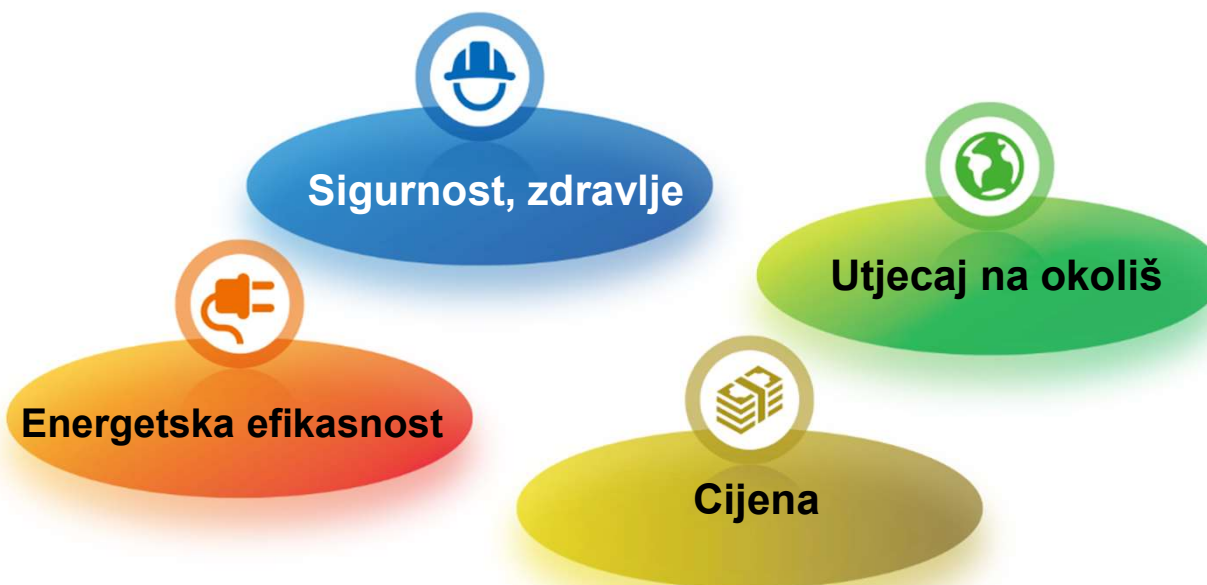
- Povećavati energetska efikasnost opreme i sustava
- **Odabirati odgovarajuće rashladne medije za postizanje optimalnih rezultata**
- Rukovoditi se principom održivosti

Održivost



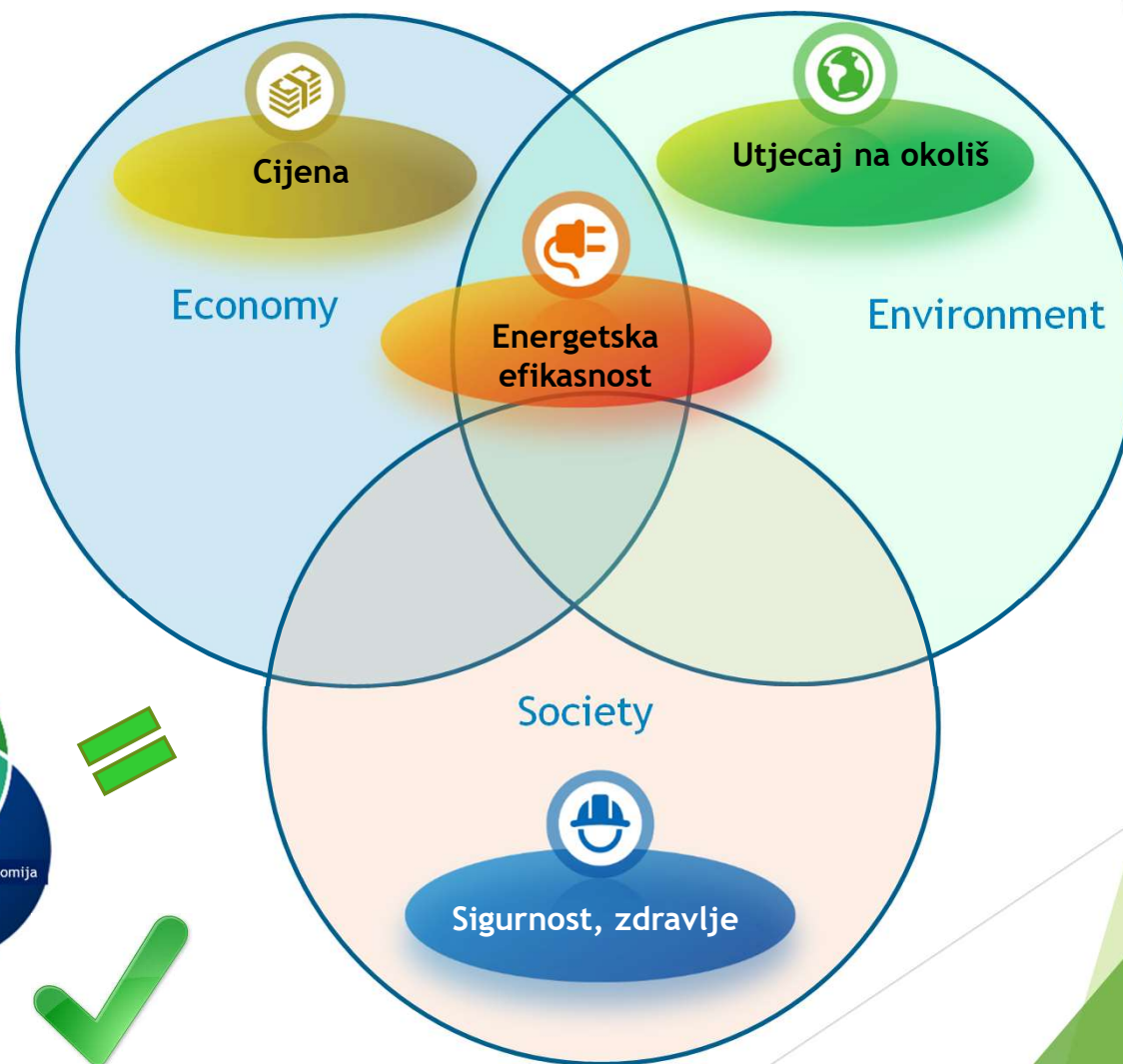


Mogući faktori za odabir optimalnog rashladnog medija



Četiri osnovna faktora za odabir optimalne radne tvari
za svaku pojedinu aplikaciju

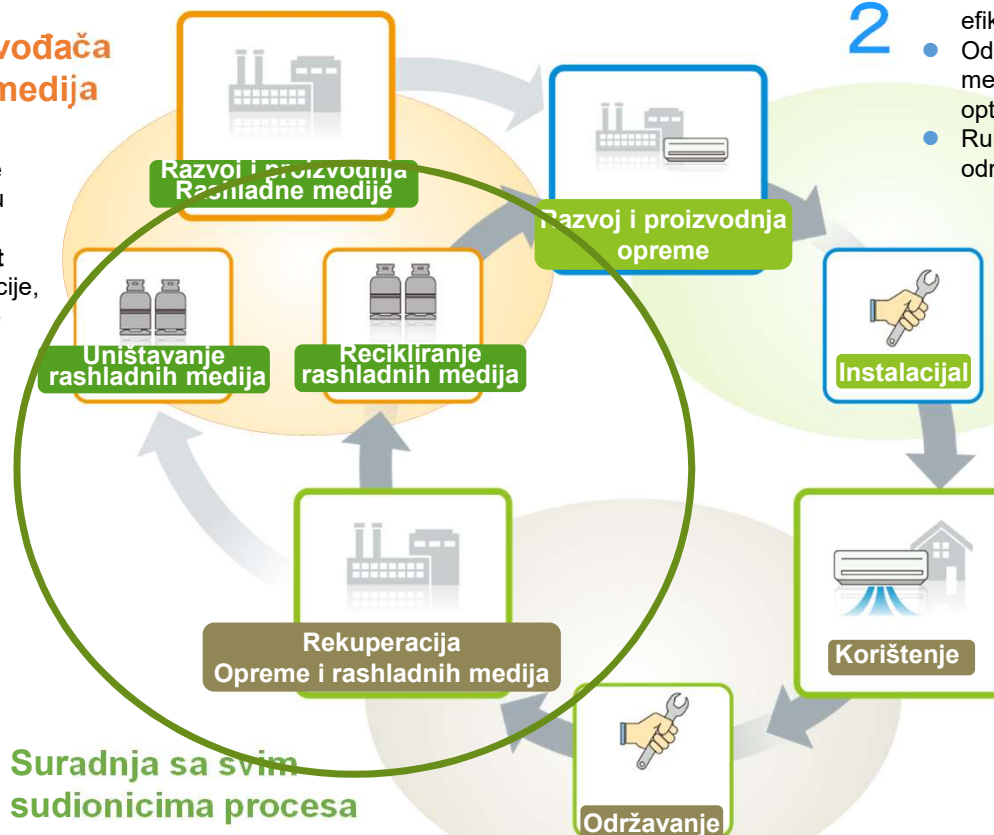
Mogući način za odabir optimalnog rashladnog medija



Uloga proizvođača u ostvarenju održivog životnog ciklusa rashladnih medija i opreme

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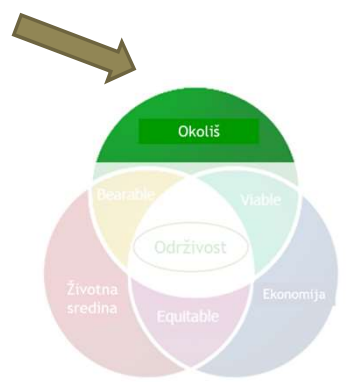
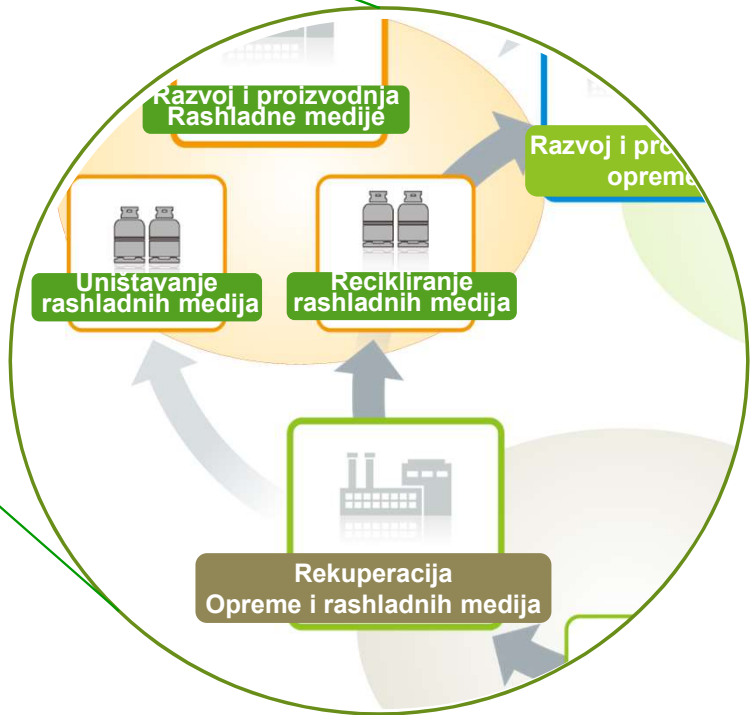
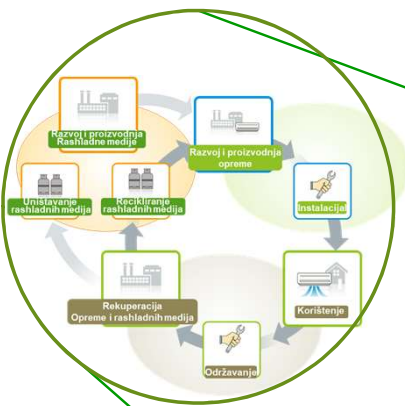
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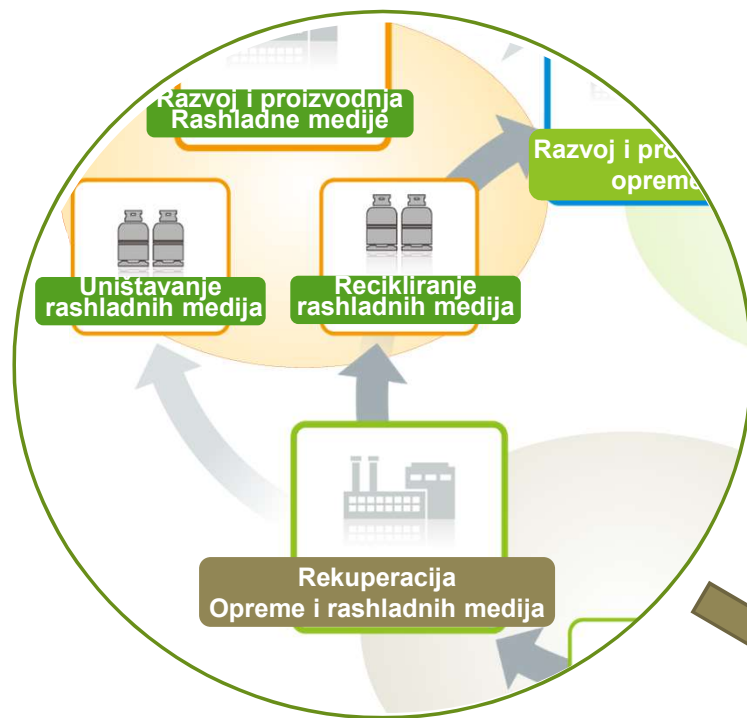
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- Rukovati se principom održivosti



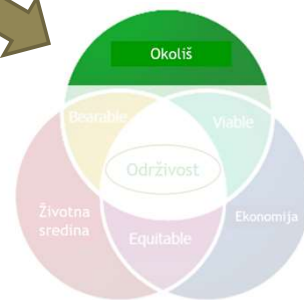


Rekuperacija - uzimanje rashl.medija iz opreme

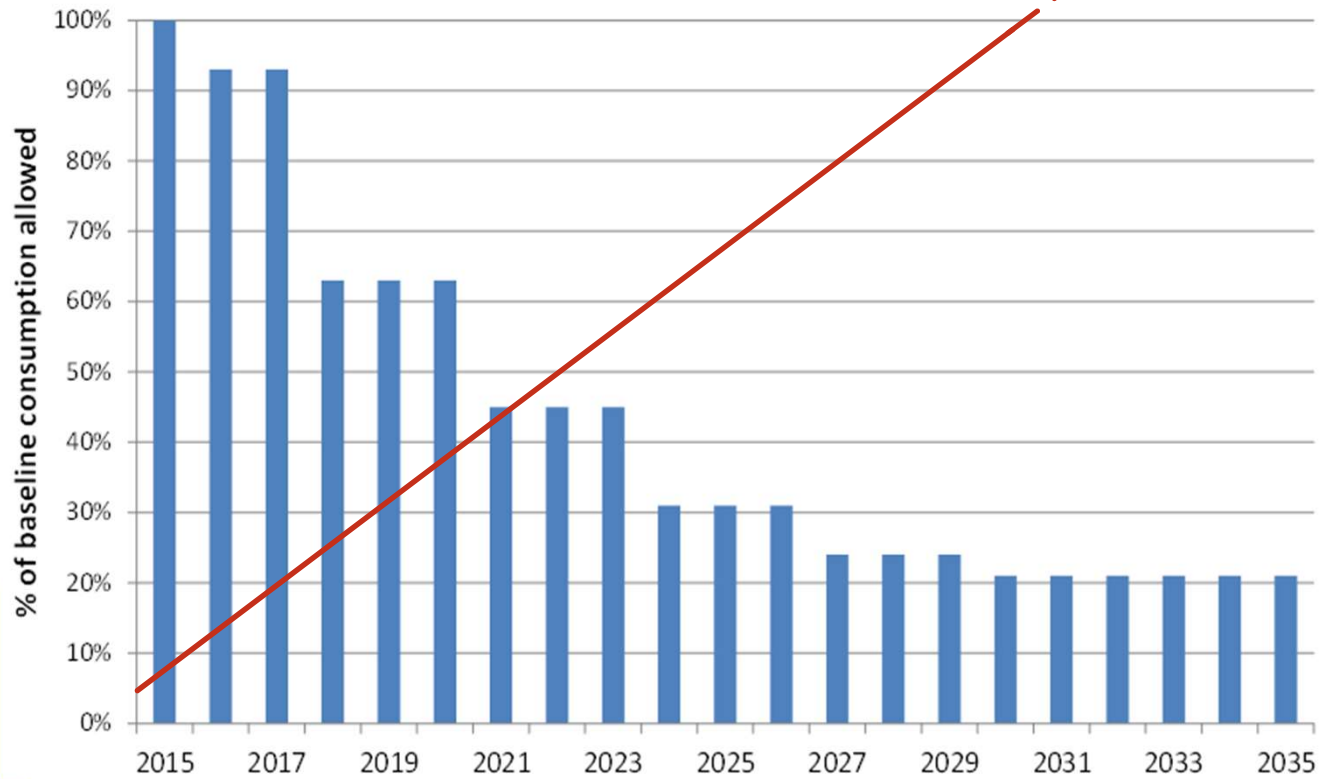
Recikliranje - bazično 'čišćenje' rashl.medija - voda, ulje i čvrste čestice

Obnavljanje - posebni stojevi, u tvornici - nakon toga rashl. medije je kao nov

Uništavanje - spaljivanje, rastavljanje na spojeve



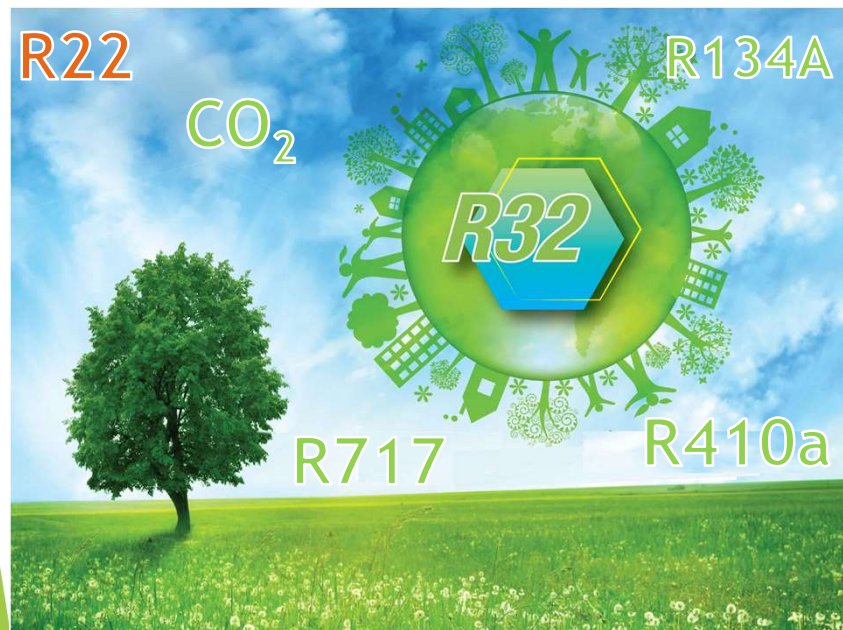
EU plan za smanjivanje korištenja fluoriranih ugljikovodika F- Gas regulativa



Recikliranje unapređuje i omogućuje:

- Savjesno ponašanje prema okolišu
- Smanjenje negativnog utjecaja na globalno zatopljenje (GWP)
- Ponovno korištenje medija – uštede
- Dovoljno rashladnog medija (dolazi i u BiH)
- Cirkularna ekonomija (pozitivan trend)
- Imidž održive kompanije
- **ODRŽIVOST** poslovanja u budućnosti

Illegalna trgovina rashladnim medijima



► Ilegalni putovi radnih tvari - crno tržište

Nelegalne radne tvari ulaze u EU iz susjednih država koje nemaju F gas regulativu (da, i Bosna i Hercegovina je na listi)

- Veliki Grčki distributeri se žale da u 2018 čak do 50% tržišta je preplavljeno nelegalnim radnim tvarima
- Poljska - tržište je preplavljeno ilegalnim uvozom*
- Vodeće 'švercane' radne tvari: - R404A, R410A, R134A ali i **R22**
- Cijene su često (bile) i višestruko niže
- Kvaliteta:
 - Razne kategorije, ali čak i one od renomiranih proizvođača
 - Neprovjerenja kvaliteta→ Prevladavaju necertificirani (i nepovratni) cilindri

*Cooling post, Lipanj 2018

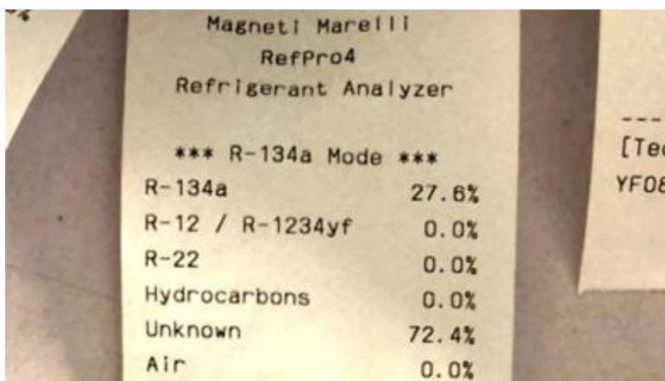


Analysis made on disposable cylinder that circulates in a non-EU country very close to Italy. This cylinder arrives in EU countries too for the auto repair sector !



Ilegalne radne tvari - loš utjecaj na industriju

- ▶ Loša kvaliteta (bez certifikata) i u biti nepoznat sastav u cilindru - velika prijetnja za sigurnost
- ▶ Negativan utjecaj na okoliš i industriju
- ▶ Sa 'dodatnim' količinama potkopava se utjecaj F-gas regulative - politika EU za smanjenje CO2 emisija
- ▶ Jednokratni cilindri - ekološki problem + prijetnja za sigurnost
- ▶ ODS tvari poput R22 (ODS - oštećuju ozon)
- ▶ Bez dokumentacije i bez provjera propuštanja - nekontrolirano propuštanje jer nema servisnih kartica i zapisnika o izvršenom pregledu
- ▶ Nepoštena tržišna utakmica sa instalaterima koji poštuju zakone
- ▶ Potencijalno povećanje kvarova opreme - smanjeno povjerenje u industriju klimatizacije
- ▶ Potencijalno povećanje administracije (reakcija država članica)
- ▶ Loš publicitet za sve uključene i loš imidž



► Illegal refrigerant

Banned R22 openly sold in disposables

7 SEP 2018 0



POLAND: The *Cooling Post* has found that illegal ozone-depleting R22 refrigerant is being openly sold in illegal disposable cylinders in Poland under the very noses of the authorities.

In recent weeks, the *Cooling Post* has highlighted the huge amount of refrigerant being sold, quite openly, on the internet. Much of this is in disposable cylinders (which have been banned since 2007), possibly imported without quota, and without any assurance that the refrigerant is only to be sold to F-gas certified personnel/companies.

Apart from being in clear breach of European regulations, there have also been concerns and evidence that some of these cylinders may actually contain potentially dangerous mixtures of gases rather than the specified refrigerant.

Now the *Cooling Post* has discovered hoards of gas in illegal disposable cylinders being openly sold on the Polish classified website OLX, some of it, supposedly, virgin R22 which has been banned since 2010.

The Polish refrigerant distributors association PROZON has previously highlighted the problems its country faces with a massive and growing problem of HFC smuggling and sales of refrigerant in disposable cylinders over the internet.

Sources at the association have reported that it has had some recent success in getting



Illegal refrigerant costs Greece €20m

23 JUL 2018 0



The Greek parliament building in Athens

GREECE: The Greek air conditioning and refrigeration industry has accused EU member state Bulgaria of being a gateway for illegal refrigerant from Albania, Macedonia and Turkey.

Fourteen companies and organisations representing air conditioning and refrigeration equipment manufacturers and distributors, contractors and engineers, have written to the Greek government and customs authorities imploring them to stem the flow of illegal refrigerants across its borders.

The level of illegal imports, it claims, is costing the Greek State over €20m in lost VAT and taxes.

The Greek industry accuses Albania, Macedonia, Turkey and Bulgaria of not adhering to EU legislation and serving as "starting points" for the illegal import of refrigerants. Although an EU member state, it says Bulgaria acts as a gateway for the entry of illegal quantities "which are then introduced to Greece through the EU borders with illegal documentation".

Neki primjeri kazni u EU za ilegalno ispuštanje i trgovinu rashladnim medijima

Breach	Penalty
<p>Intentional release of HFCs in breach of Art 3(1)</p>	<ul style="list-style-type: none"> • Czech Republic – fine up to €39,000 • Cyprus – fine up to €5,000 (forward to Court of Justice if bigger) • Belgium – none • Denmark – fine or in severe cases imprisonment up to two years, case by case basis • Luxembourg – prison sentence one month - one year or fine €50,000 - €500,000 • Poland – fine apx €930-€3,500 • Slovenia – fines of €1,200-30,000 • UK – max penalty apx €225,000
<p>Placing HFCs on the market without a quota in breach of Art 15(1) para 2</p> <p>Placing equipment or products on the market in breach of Art 11 & Annex II</p> <p>Importing equipment containing HFCs without a quota in breach of Art 14(1)</p>	<ul style="list-style-type: none"> • Czech Republic – fine up to €39,000 • Cyprus – fine up to €5,000 (forward to Court of Justice) if bigger • Belgium – prison sentence eight days – three years, fines €160 up to €4,000,000. • Denmark – fine or in severe cases imprisonment up to two years, case by case basis • Luxembourg – prison sentence one month – one year or fine €50,000 - €500,000 • Poland – fine apx €1,400-€10,500 • Slovenia – fines of €1,200-30,000 • UK – max penalty apx €225,000



9 APR 2019
EIA calls for end to illegal HFC trade

UK: The EIA has called for stronger enforcement by member states and the introduction of a shipment licensing system to counter the illegal European trade in HFC refrigerants.

[Read More »](#)



28 JUN 2019
June sees 1,200 illegal refrigerant cylinders seized in Lithuania

LITHUANIA: Customs officers in Lithuania are said to have seized nearly 1,200 cylinders of illegal refrigerant since the beginning of June.

[Read More »](#)



4 APR 2019
Poland stops huge shipment of illegal refrigerant

POLAND: Authorities in Łódź have intercepted a shipment of 25 tonnes of illegal refrigerant with a market value of around €600,000.

[Read More »](#)



5 APR 2019
Bulgarian customs seize over a tonne of illegal HFCs

BULGARIA: Customs officers in the southern Bulgarian town of Kapitan Andreevo have foiled an attempt to smuggle HFC refrigerant into the country in illegal disposable cylinders.

[Read More »](#)



3 JUL 2019
Estonia warns on illegal refrigerant

ESTONIA: Warnings regarding the proliferation of refrigerant in illegal disposable cylinders have been issued by the Estonia's Ministry of the Environment.

[Read More »](#)

Individualne akcije pojedinih organizacija



UK: A leading environmental group is to investigate reports of widespread illegal sales and use of HFCs in Europe.

In response to recent *Cooling Post* reports of illegal refrigerant imports and sales across Europe, the Environmental Investigation Agency (EIA) has contacted over 150 associations, refrigerant distributors, consultants and contractors in an effort to understand the current situation.

The group, which recently exposed widespread illegal use of CFCs in China, says it is collecting data on the scale of the problem, the reason behind the illegal activity and exploring measures to be taken to ensure effective implementation of the EU F-gas regulation.

The results of its investigations are expected to be published in November.



In recent months the *Cooling Post* has exposed widespread and ongoing illegal activity, seemingly brought about by the European F-gas phase down measures. A huge drop in import and production quotas has resulted in massive price increases and supply issues with some of

Amazon in court over illegal F-gas sales

26 SEP 2018 0



ITALY: A group of Italian refrigeration contractors is taking online retailer Amazon to court for continuing to sell HFC refrigerant without requiring buyers to be F-gas certified.

With the European Commission, EU member governments and authorities across Europe failing to act to stem the flagrant abuses of the F-gas regulations, 18 member companies of Italy's CNA, the National Confederation of Crafts and Small and Medium Enterprises, have started their own action by taking Amazon to court for illegal F-gas sales.

The plaintiffs claim unfair competition and are asking the Court of Rome, as a matter of urgency, to force Amazon to stop selling F-gas to buyers without the necessary certification. The first hearing has been scheduled for October 11.

The CNA first raised concerns over the issue two years ago, which highlighted how the lack of controls created serious problems of credibility with companies regarding the whole F-gas system.

In March, a presenter on a popular Italian tv station exposed the ease with which anyone without the necessary F-gas qualifications could purchase refrigerant by obtaining an 800g bottle of R410A cylinder from Amazon.



**KEEP IT CLEAN
AND RECYCLE!**

**STAY
SUSTAINABLE**