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# **RESET2020 – A NEW PROGRAM TO BOOST RESOURCE EFFICIENCY IN AUSTRIA**

ANDREAS TSCHULIK, AUSTRIA

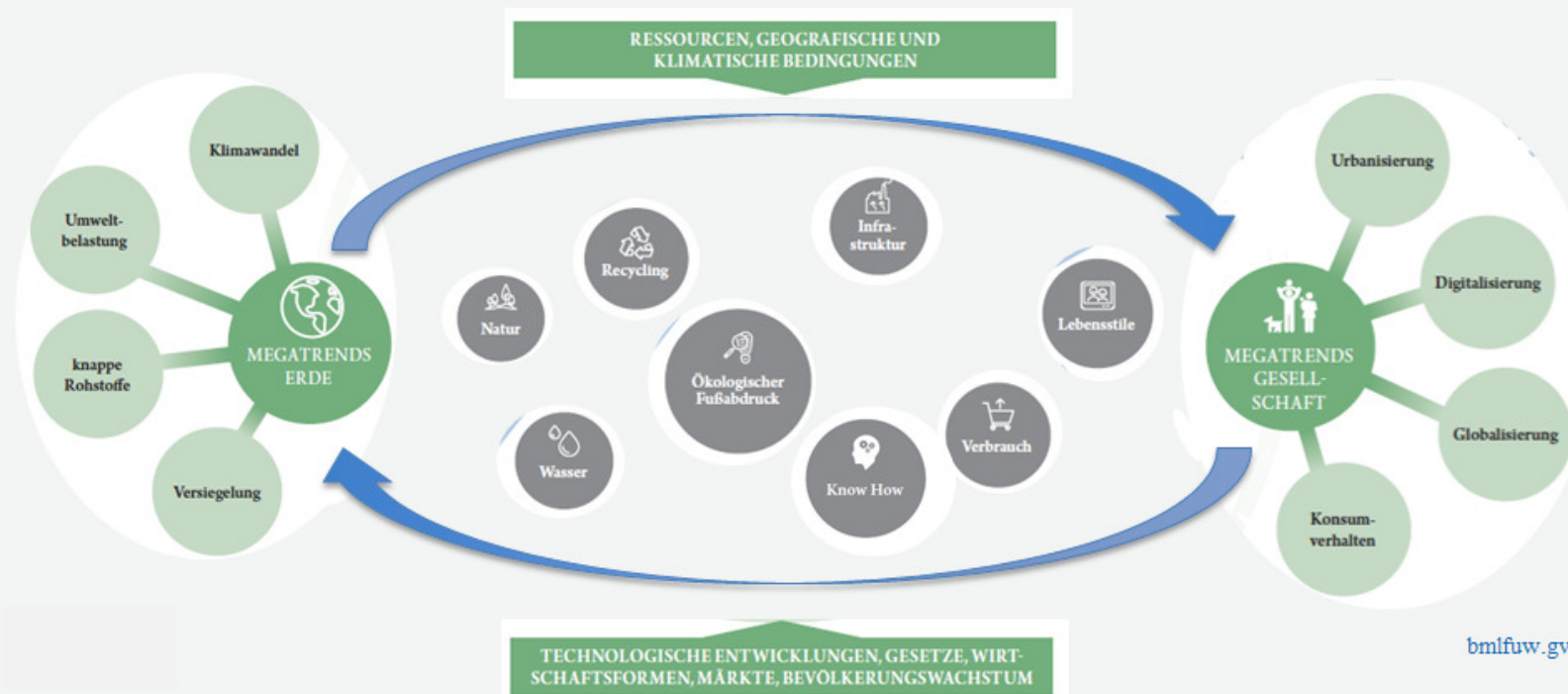
European Resources Forum, Berlin 2016

# AGENDA

- RESET2020 – STRATEGY
- NECESSITY & OCCASION
- RESET2020 – ACTIVITIES
  - GREENTECH INNOVATION DYNAMICS
  - RESOURCE EFFICIENCY - ENTERPRISES
  - RESOURCE EFFICIENCY - MUNICIPALITIES
- OUTLOOK - EVENTS



# RESET2020 – STRATEGY FOR RESOURCES.EFFICIENCY.TECHNOLOGIES



Bildnachweis: Icons von Freepic via Flaticon

## RESET2020 - STANDS FOR ...

- the **implementation** of EU - national policies & programs, such as Circular Economy Package, Green Action Plan for SMEs, 7th Environmental Action Plan, Resource Efficiency Action Plan (REAP)
- the **promotion** of the policy field of resource efficiency, technology & circular economy at the BMLFUW
- **environmental protection and sparing use of resources**, optimization of material resources, product design, cascade systems, reuse ...
- a strong **position of Austria** as regards questions of efficiency, digitalisation, technologies & services, production & consumption
- ensuring **living and business areas** that are fit for the future
- **impetuses** to exchange, networking & cooperation

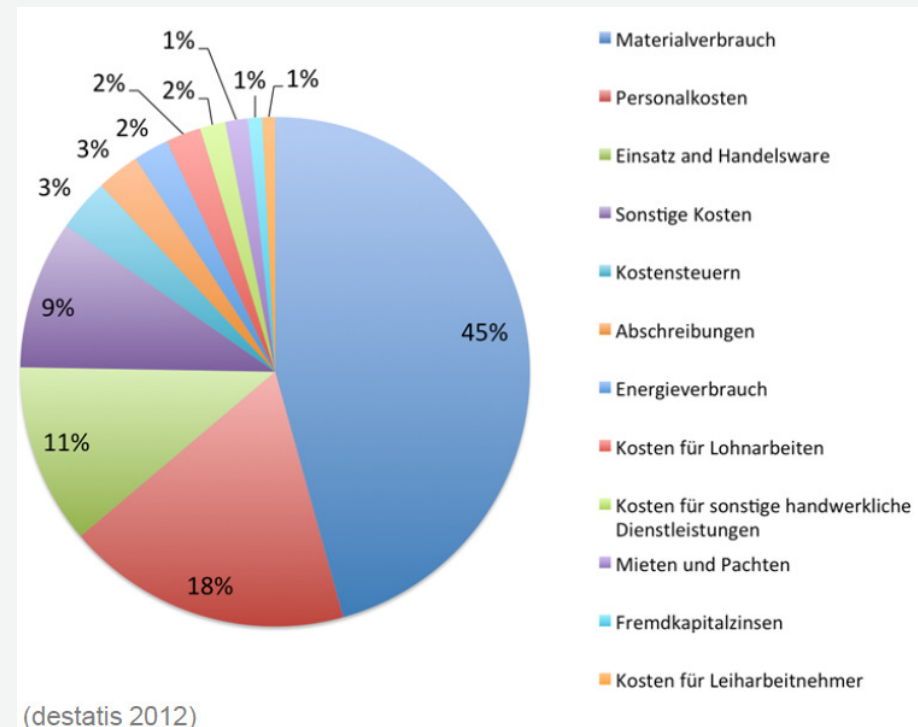
# NECESSITY & OCCASION

## Production of material goods Austria:

- **Material cost:** >40%
- **Enterprises:** 63,000
- **Employees:** approx. 1 million
- **Turnover:** approx. 260 billion €/year

## Challenge enterprises:

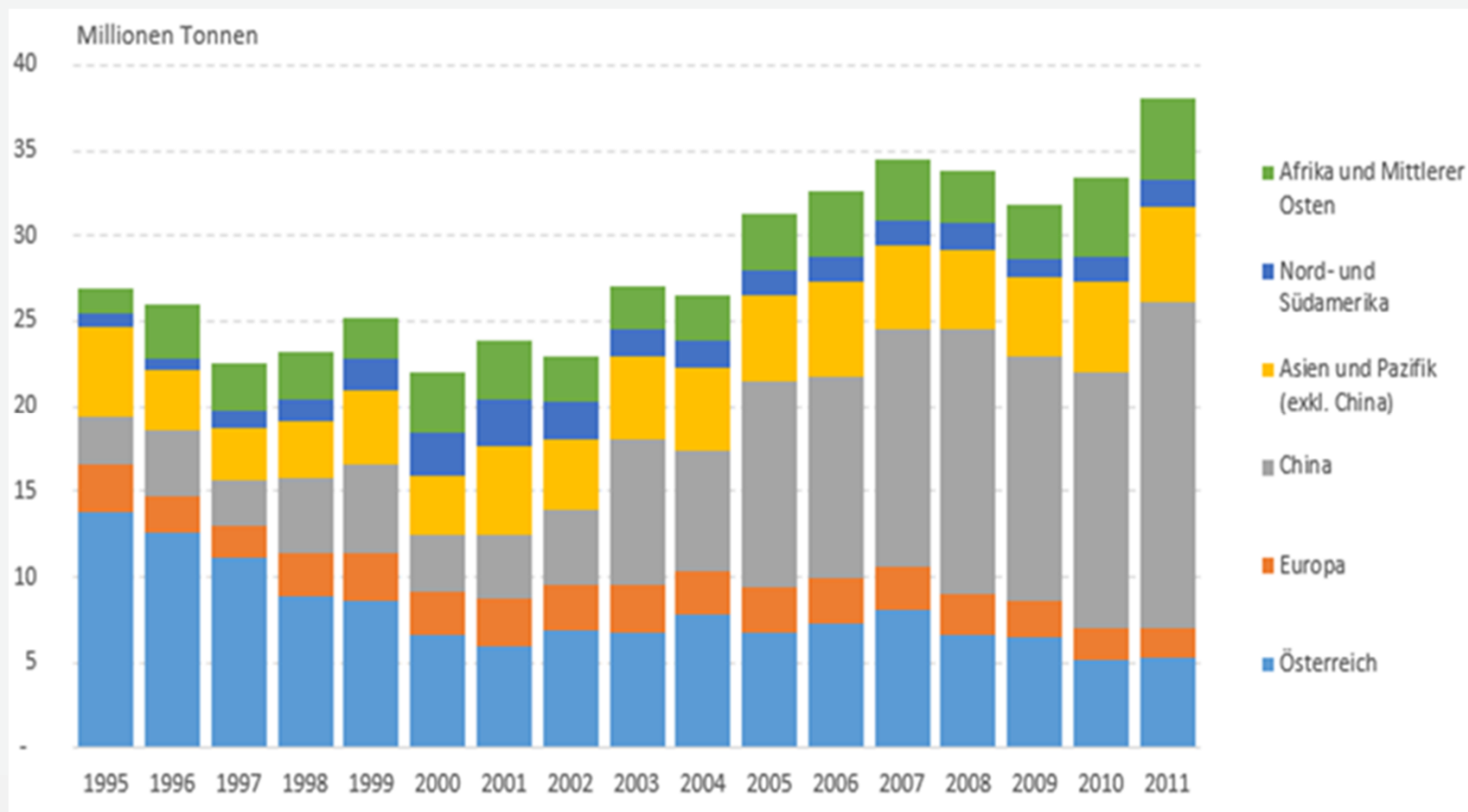
- Finding cost-efficient **optimisation strategies** to enhance material productivity



# NECESSITY & OCCASION

Global dimension: Material footprint of public consumption 1995-2011

by countries of origin of the raw materials

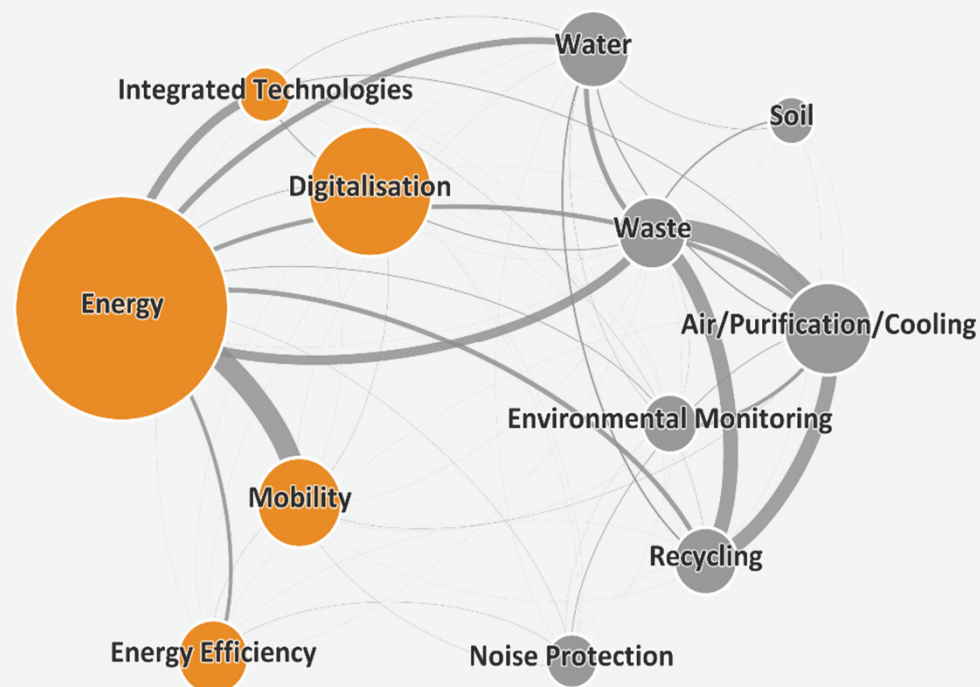


Source: Factsheet WU 2016



# THE FUTURE IS NOW: HOW TO WIN WITH PATENTS

- **Technology Analysis** via patents
  - Which **position** does AT hold in EU & global competition?
  - Which **future technologies & technology strengths** are linked to **GreenTech**?
  - Are the **technology profiles** of the **regions** sustainable / fit for the future?
  - Which **strategic potentials**?  
(collaborations & value-added networks)



Source: Economica 2016

Key: Size of node = frequency of patent applications, width of edges = co-patenting rate, colour = thematic group (orange = energy/ mobility, red = environmental technologies)

# TECHNOLOGY STRENGTHS - AUSTRIA

Patent performance, national level,

**AT's rank among EU28 + EFTA**

Environmental technologies	Water (Rank 9)
	Waste (Rank 10)
	Recycling (Rank 8)
	<b>Noise Protection (Rank 5)</b>
	Environmental Monitoring (Rank 6)
	Soil (Rank 13)
Energy, Mobility	Air/Purification/Cooling (Rank 6)
	Energy (Rank 7)
	<b>Mobility (Rank 1)</b>
	<b>Energy Efficiency (Rank 2)</b>
	<b>Integrated Technologies (Rank 5)</b>
	Digitalization (Rank 6)

Detailed evaluation: Material efficiency; patent performance, **rank achieved by AT in global terms**

**Material efficiency (Rank 11)**

Source: Economica 2016 EP/PCT patent publications 2006-2015 regional assignment via place of invention.

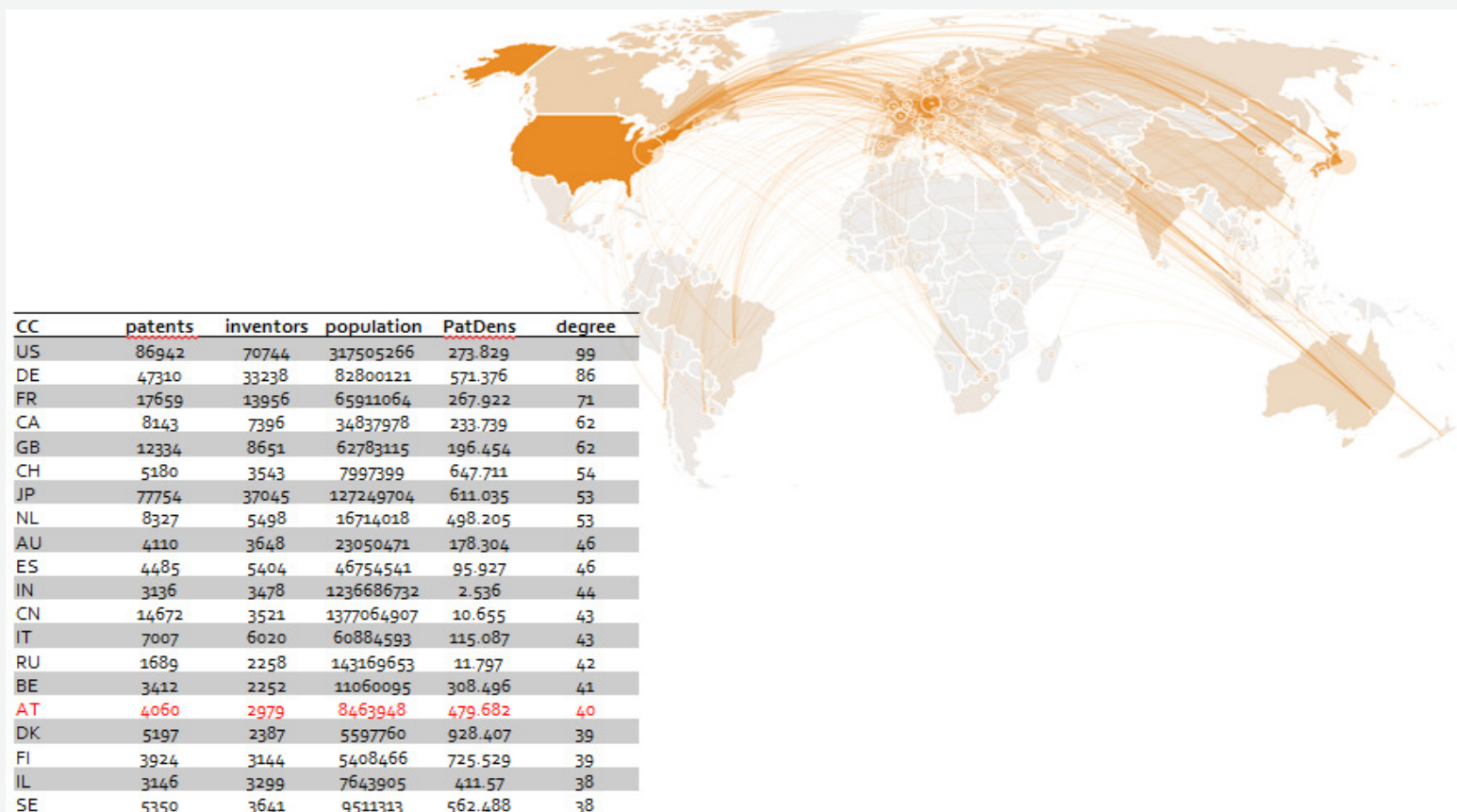




# TECHNOLOGY STRENGTHS

## INTERNATIONAL NETWORKS OF INVENTORS

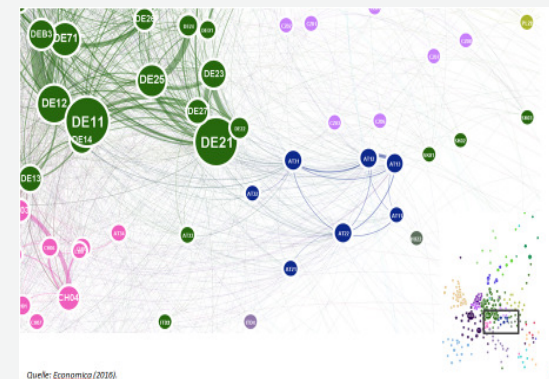
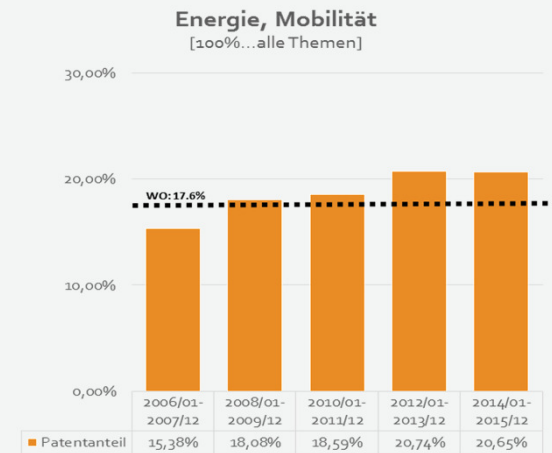
### OVERALL - GREENTECH



Quelle: Economica (2016).

# POLICY RECOMMENDATIONS

- Further improve **framework conditions** for TOP innovations in areas of strength that are globally on the rise (e.g. tax incentives, subsidies)
- **Networking** with specialised regions to boost knowledge spillovers
- **Matching** of existing technology profiles, research structures & subsidisation regimes





# RESOURCE EFFICIENCY: HOW TO USE POTENTIALS?

- **Why resource efficiency?**
  - Strategy to reduce production costs, gain cost advantages & competitive benefits, develop new markets & export opportunities
  - Innovation driver > innovation dynamics
  - Creation / Safeguarding of jobs
  - Contribution to environmental protection & sparing use of resources
- **Which levers?**
  - Management: Business Strategy / Controlling
  - Design of products & services: Sustainable, circular
  - Substitution: Renewable resources / new materials
  - Cascade systems / Supply Chain
  - Innovative technologies & services / business models / Digitalization
  - Circular economy cooperation: Regional <> Global



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## ADVISORY PROGRAM FOR RESOURCE-EFFICIENT PRODUCTION

- **Development of material efficiency module**
  - Analysis of potential, quick check, intensive counselling
- **Establishment of consultant pools & quality assurance**
  - Development of consultant pools, further training, e-learning
- **Financial advice for the implementation**
  - Funding opportunities, check of private funding concepts
- **Extension of alternative business models**
  - Chemical leasing, contracting models for raw materials
- **Networking, information & communication**



**REGIONALPROGRAMME**  
FÖRDERUNGEN FÜR UMWELT- UND ENERGIEBERATUNGEN





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# RESOURCE EFFICIENCY IN MUNICIPALITIES: HOW WILL WE LIVE & WORK IN THE FUTURE?

- **Why resource efficiency?**
  - Diversity of tasks
  - Cost pressure, tight budgets
  - Inefficient resource use
  - Shift of resources policy towards a circular economy
  - Use of local resources!
  
- **Pilot project: Resource-efficient municipality**
  - Awareness raising
  - Catalogue of measures for sparing use of resources
  - Picture book of the opportunities
  - Online self-check - resource efficiency potentials
  - Information & consulting tools
  - Learning - From – One Another



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## OUTLOOK - EVENTS

- ✓ **Dialogue event “Zukunftslabor nachhaltiger Konsum und Produktion für innovative Bussines Ideen”**, 17 November 2016, Linz, <https://eventmaker.at/zukunftslabor2016/>
- ✓ **Resource Conference Vienna “Prosperity without Growth of Natural Resource Use”**, 21 November 2016, Vienna, <http://www.growthintransition.eu/resource-conference-vienna-2016/>
- ✓ **Information event:** “Austrian environmental technology: innovative in the country, successful in the world”, 29 November 2016, Vienna, <http://www.ecotechnology.at/content/österreichische-umwelttechnik-innovativ-im-land-erfolgreich-der-welt>
- ✓ **2nd National Resources Forum “Ressourcenwissen – Bildung als Schlüssel zu Ressourcen-effizienz”**, 26 & 27 January 2017, Salzburg, [http://www.ressourcenforum.at/?post\\_type=tribe\\_events](http://www.ressourcenforum.at/?post_type=tribe_events)



# THANK YOU FOR YOUR ATTENTION!

*More information:*



<https://www.bmlfuw.gv.at/umwelt/nachhaltigkeit/ressourceneffizienz.html>



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