



CIRCULAR
MATERIALS



SGO SST - General Assembly and Technical Conference 2026

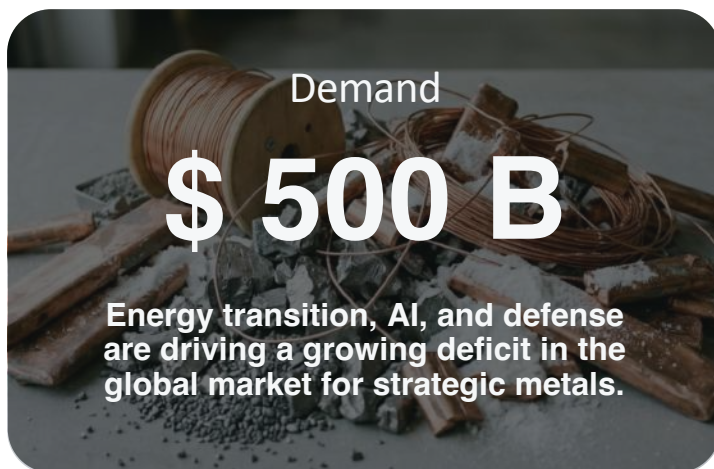
FROM WASTEWATER TO STRATEGIC RESOURCES:

Industrial-Scale Metal Recovery
for Sustainable Surface Treatment

Riccardo Momoli
Director Business & Corporate Development

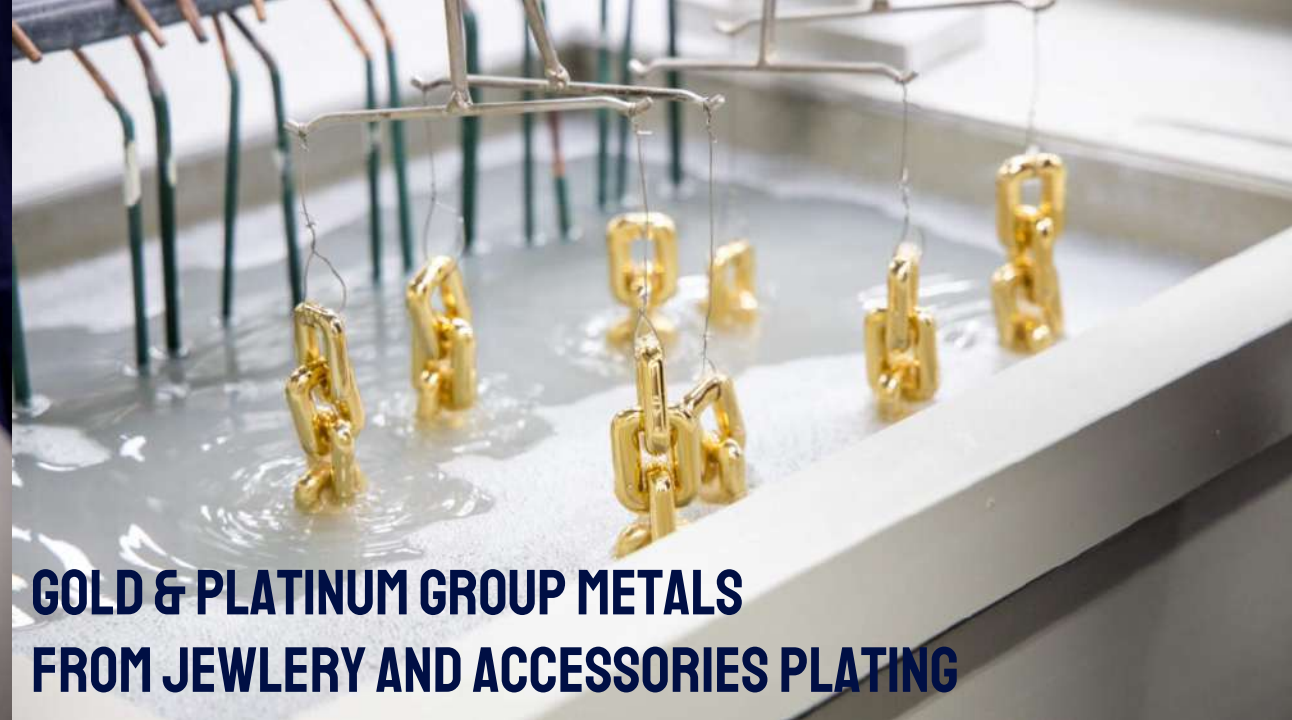
May 12, 2026
Biel, Switzerland

PROBLEM: **A PERFECT STORM OF 3 CHALLENGES**

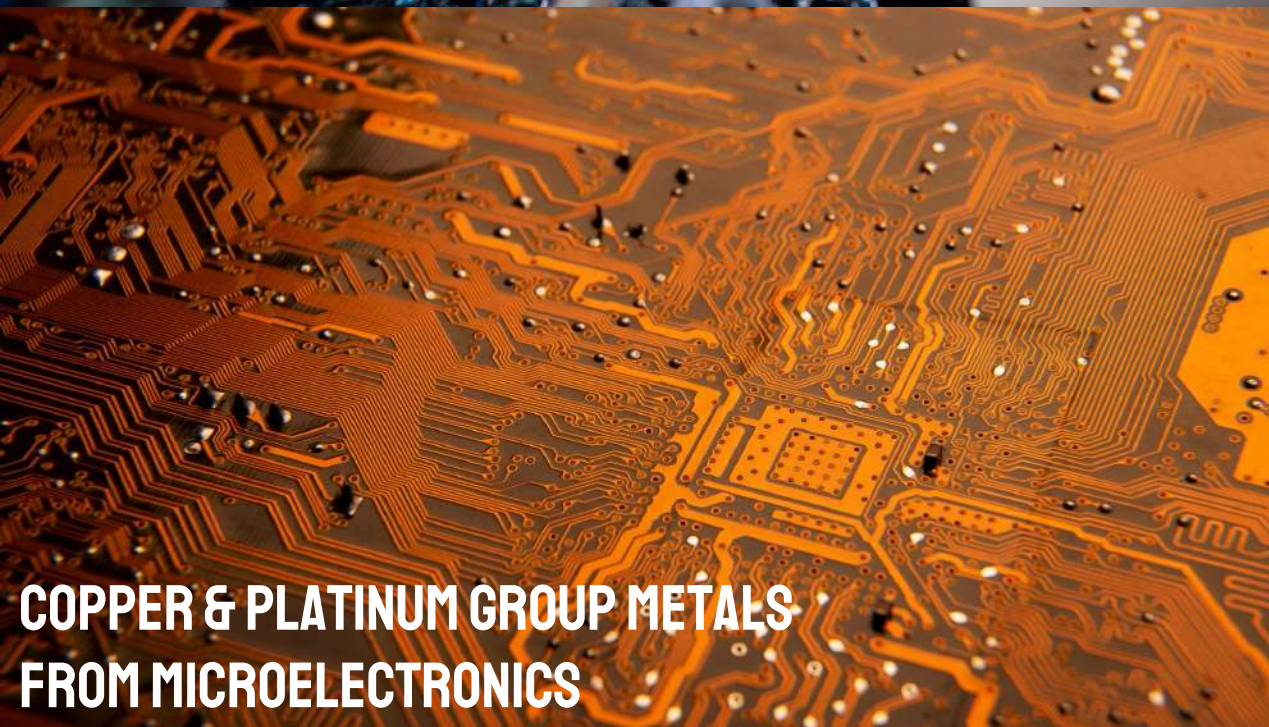




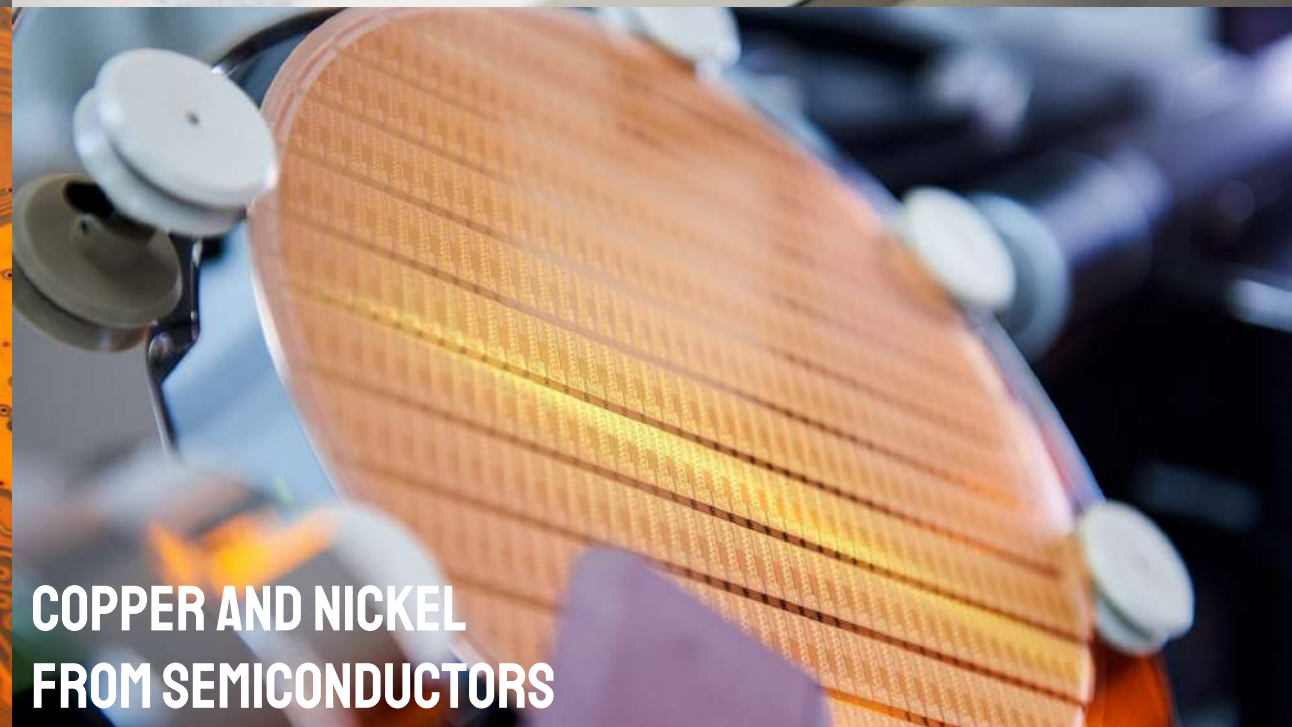
**NICKEL AND COPPER
FROM SURFACE TREATMENT OF METALS**



**GOLD & PLATINUM GROUP METALS
FROM JEWELRY AND ACCESSORIES PLATING**



**COPPER & PLATINUM GROUP METALS
FROM MICROELECTRONICS**



**COPPER AND NICKEL
FROM SEMICONDUCTORS**



**NICKEL AND CHROMIUM
FROM AVIATION AND DEFENCE**



**NICKEL, COPPER AND CHROMIUM
FROM AEROSPACE**

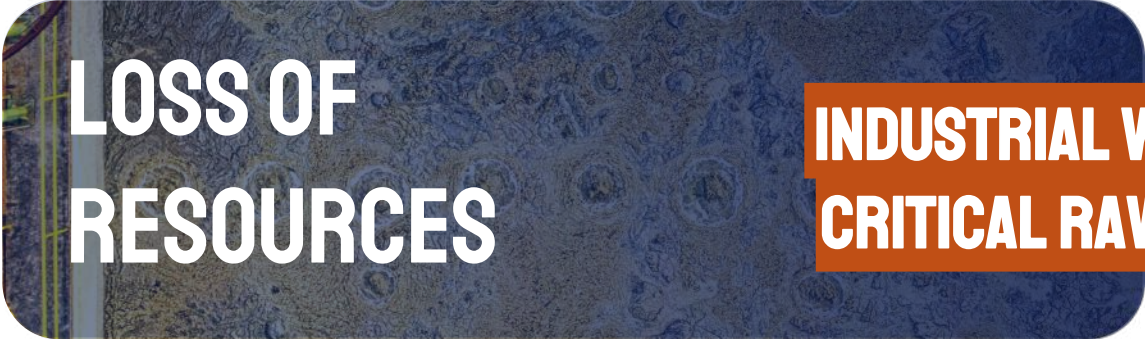


**GOLD & PLATINUM GROUP METALS
FROM MEDICAL DEVICES**



**PLATINUM GROUP METALS, NICKEL AND CHROMIUM
FROM PHARMA & API MANUFACTURING**

CRITICAL RAW MATERIALS: AT THE INTERFACE OF STRATEGIC & ENVIRONMENTAL



**LOSS OF
RESOURCES**

**INDUSTRIAL WASTEWATER
CRITICAL RAW MATERIALS**



**RECOVERY OF
RESOURCES**



**ENVIRONMENTAL
LIABILITY**

**UP TO 30% LOST IN LANDFILLS
AND NATURAL ECOSYSTEMS**



**ENVIRONMENTAL
PROTECTION**

> 15 000 TPA
20%
80%

**non-ferrous metals in wastewater
released to surface water
dissipated in landfill as sludge**

« By transforming industrial wastewater into a resource, we open up a completely new pathway for the secure and sustainable supply of critical raw materials in Europe. »



STRATEGIC VALUE CHAINS



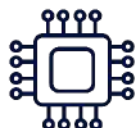
Chemical industry



Synthesis of pharmaceutical APIs (active ingredients)



Electroplating and galvanics



Semiconductor and electronics manufacturing



Metallurgical industry and refining



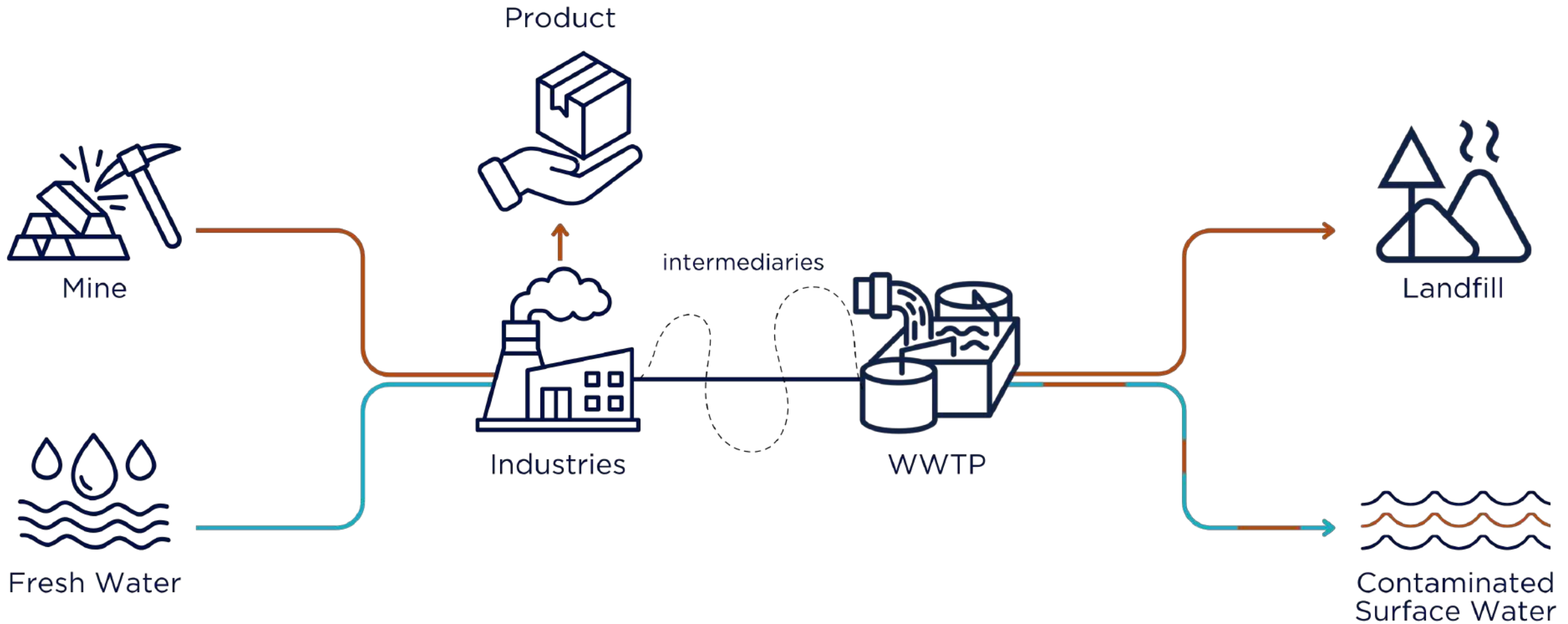
Defense and aerospace

1 1.0079 H Hydrogen																	2 4.0026 He Helium						
3 6.9410 Li Lithium	4 9.0122 Be Beryllium																	5 10.811 B Boron	6 12.011 C Carbon	7 14.007 N Nitrogen	8 15.999 O Oxygen	9 18.999 F Fluorine	10 20.180 Ne Neon
11 22.990 Na Sodium	12 24.305 Mg Magnesium	Chromium III e VI																13 24.982 Al Aluminium	14 28.086 Si Silicon	15 30.974 P Phosphorus	16 32.065 S Sulfur	17 35.453 Cl Chlorine	18 35.948 Ar Argon
19 39.098 K Potassium	20 40.078 Ca Calcium	21 44.956 Sc Scandium	22 47.867 Ti Titanium	23 50.942 V Vanadium	24 51.996 Cr Chromium	25 54.938 Mn Manganese	26 55.845 Fe Iron	27 58.933 Co Cobalt	28 58.933 Ni Nickel	29 63.546 Cu Copper	30 65.380 Zn Zinc	31 69.723 Ga Gallium	32 72.640 Ge Germanium	33 74.922 As Arsenic	34 78.960 Se Selenium	35 79.904 Br Bromine	36 83.798 Kr Krypton						
37 85.468 Rb Rubidium	38 87.620 Sr Strontium	39 88.906 Y Yttrium	40 91.224 Zr Zirconium	41 92.906 Nb Niobium	42 92.906 Mo Molybdenum	43 95.94 Tc Technetium	44 90.912 Ru Ruthenium	45 101.07 Rh Rhodium	46 106.42 Pd Palladium	47 106.37 Ag Silver	48 112.41 Cd Cadmium	49 114.82 In Indium	50 118.71 Sn Tin	51 127.60 Sb Antimony	52 127.60 Te Tellurium	53 126.91 I Iodine	54 131.29 Xe Xenon						
55 132.91 Cs Cesium	56 137.33 Ba Barium	57 138.91 La Lanthanum	72 178.49 Hf Hafnium	73 180.95 Ta Tantalum	74 183.84 W Tungsten	75 186.21 Re Rhenium	76 186.21 Os Osmium	77 193.22 Ir Iridium	78 196.08 Pt Platinum	79 196.97 Au Gold	80 200.59 Hg Mercury	81 204.38 Tl Thallium	82 207.20 Pb Lead	83 208.98 Bi Bismuth	84 209 Po Polonium	85 210 At Astatine	86 222 Rn Radon						
87 223 Fr Francium	88 226 Ra Radium	89 227 Ac Actinium	104 261 Rf Rutherfordium	105 262 Db Dubnium	106 263 Sg Seaborgium	107 264 Bh Bohrium	108 269 Hs Hassium	109 271 Mt Meitnerium	110 272 Ds Darmstadtium	111 273 Rg Roentgenium	112 285 Cn Copernicium	113 286 Nh Nihonium	114 289 Fl Flerovium	115 289 Mc Moscovium	116 293 Lv Livermorium	117 294 Ts Tennessine	118 294 Og Oganesson						
58 140.12 Ce Cerium	59 140.91 Pr Praseodymium	60 144.24 Nd Neodymium	61 145 Pm Promethium	62 150.36 Sm Samarium	63 151.96 Eu Europium	64 157.25 Gd Gadolinium	65 162.50 Tb Terbium	66 162.50 Dy Dysprosium	67 164.93 Ho Holmium	68 167.26 Er Erbium	69 168.93 Tm Thulium	70 173.04 Yb Ytterbium	71 174.97 Lu Lutetium										
90 232.04 Th Thorium	91 231.04 Pa Protactinium	92 238.03 U Uranium	93 238.03 Np Neptunium	94 244 Pu Plutonium	95 244 Am Americium	96 242 Cm Curium	97 247 Bk Berkelium	98 251 Cf Californium	99 252 Es Einsteinium	100 257 Fm Fermium	101 259 Md Mendelevium	102 259 No Nobelium	103 262 Lr Lawrencium										

= industrial relevance

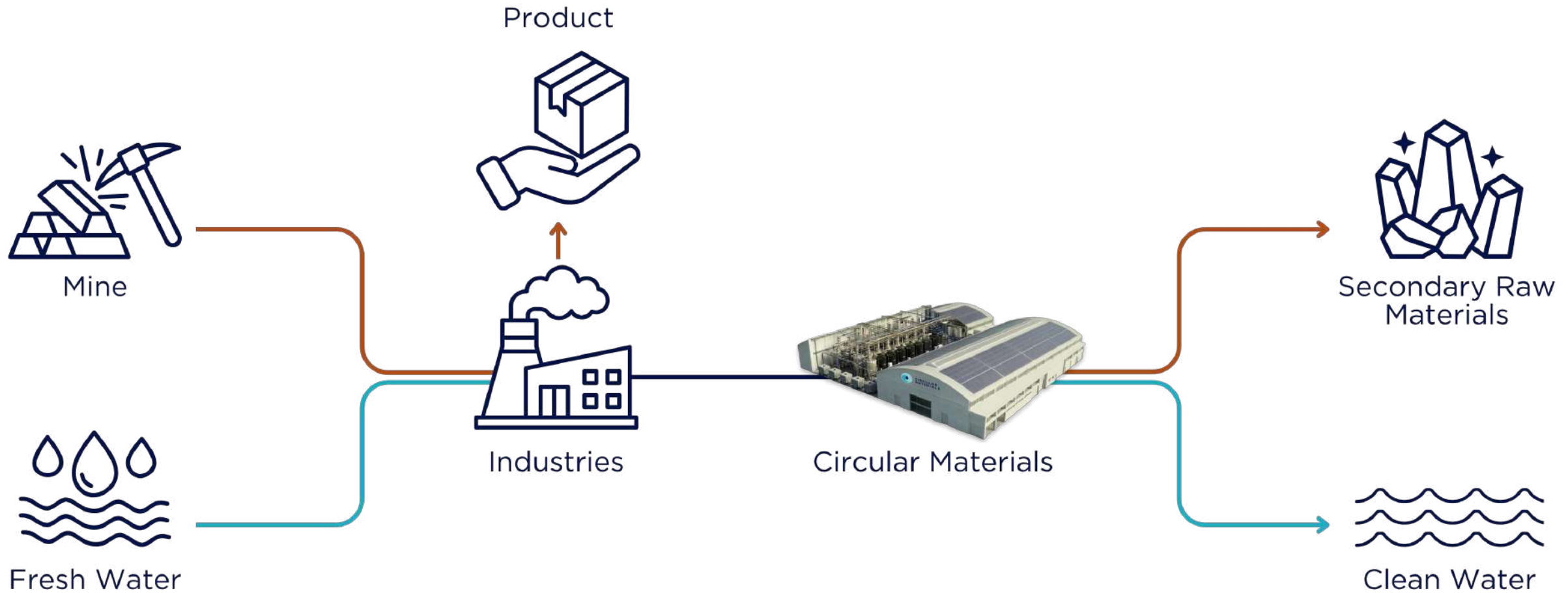
= CRM

= industrial relevance + CRM



THE METAL JOURNEY

WITH CIRCULAR MATERIALS



2019

2020

2022

2023

2024

2026 - 2032



- ✓ Company foundation
- ✓ 10L/h prototype
- ✓ Wastewater patent



- ✓ First industrial pilot scaled to 50L/h
- ✓ Multiple metals validated



- ✓ Scaled to 100L/h for deployment at wastewater treatment site
- ✓ Authorization to operate at test customers



- ✓ New tech solutions enable 50% cost and size reduction
- ✓ Deployment at 4 customer sites under rental agreement
- ✓ Heat recovery



- ✓ CM Hub Zero
- ✓ Fully authorized waste recovery site
- ✓ Fully automated and operational
- ✓ 5 lines, 1000sqm, 2Ktpa
- ✓ R&D Lab



- ✓ Deploy 5 hubs across EU by '30
- ✓ 3Ktpa metals recovered by '32
- ✓ 120Ktpa wastewater capacity

tpa = Tons per annum

EU Commission selects CM as the only Strategic Project focused on recovery of critical raw materials from wastewater.

1 OF 10 STRATEGIC PROJECTS SELECTED IN RECYCLING

Highly CAPEX efficient with 31M€ investments per 20ktpa site

From National Hub to EU Network

- Domestic supply of low carbon footprint Ni, Cu, Cr & PGMs ●
- 5,000 tpa CRMs from 130 ktpa wastewater ●
- Replicable across EU industrial clusters ●
- Building a European CRM recovery network ●
- Stockpiling support for Strategic Industries ●



2026

RECOVER-IT STRATEGIC FACILITIES IN ITALY



2027



CMHO - CADONEGHE (PD)

- ✓ Authorized Waste Treatment & Recovery Facility Q3 24
- ✓ Operating at Industrial Scale since Q1 25 (2 kt/year)
- ✓ Full process automation since Q4 25
 - ✓ End of Waste status by Q2 26
 - ✓ REACH status by Q2 26
- ✓ Circular Materials' Qualification + R&D Center



CMHI - FERRARA (FE)

- ✓ 20 kt/year industrial capacity (10x scale vs CMHO)
- ✓ Environmental permitting process initiated in Q1 26
 - ✓ Front-End Engineering completed by Q2 26
- ✓ Final Investment Decision by Q2 26
- ✓ Start of procurement planned Q3 26
- ✓ Commercial operations by Q3 27

WHERE ARE METALS LOST?

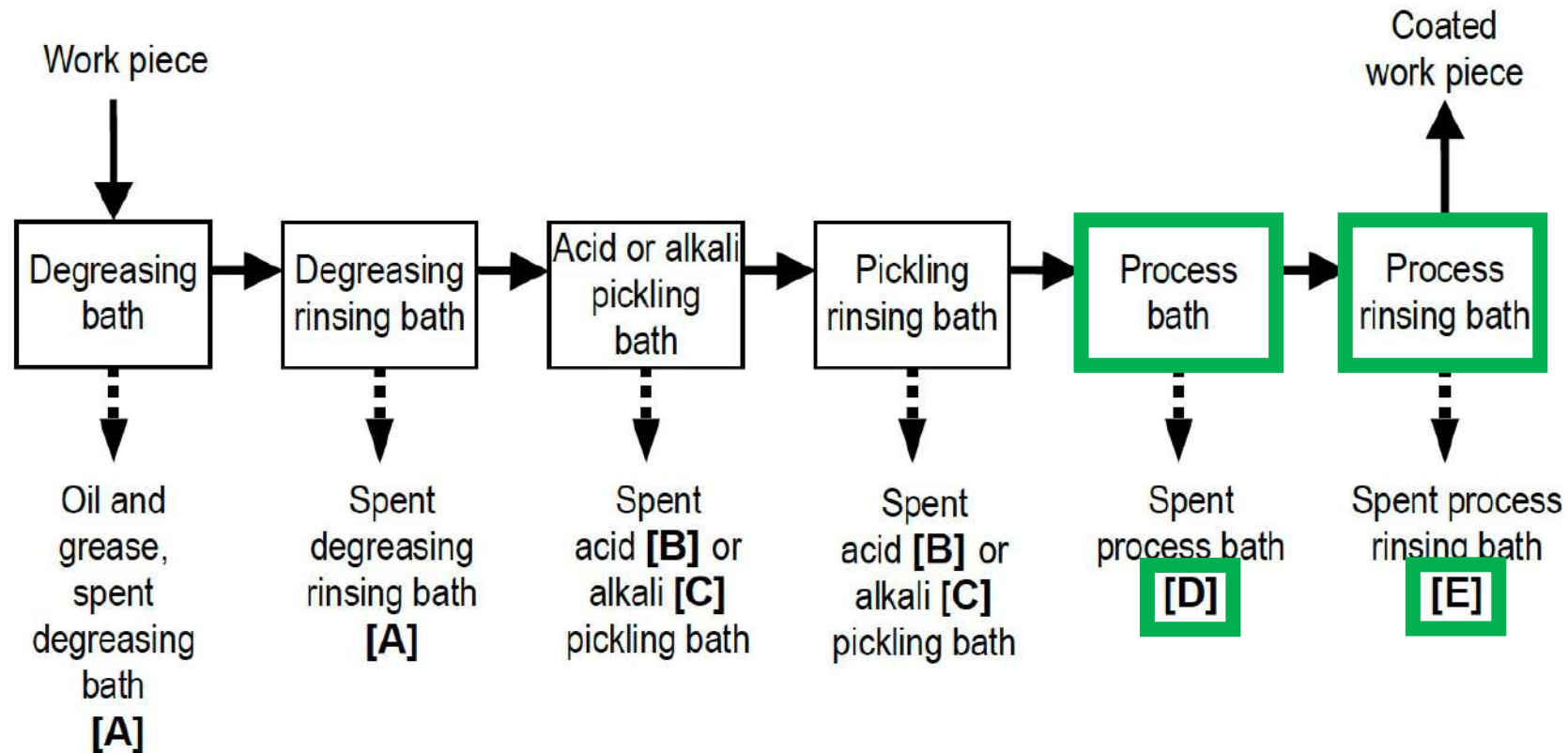


Fig 1: An example representation of a galvanising process line and the possible types of waste

HOW ARE WASTEWATER CURRENTLY TREATED?

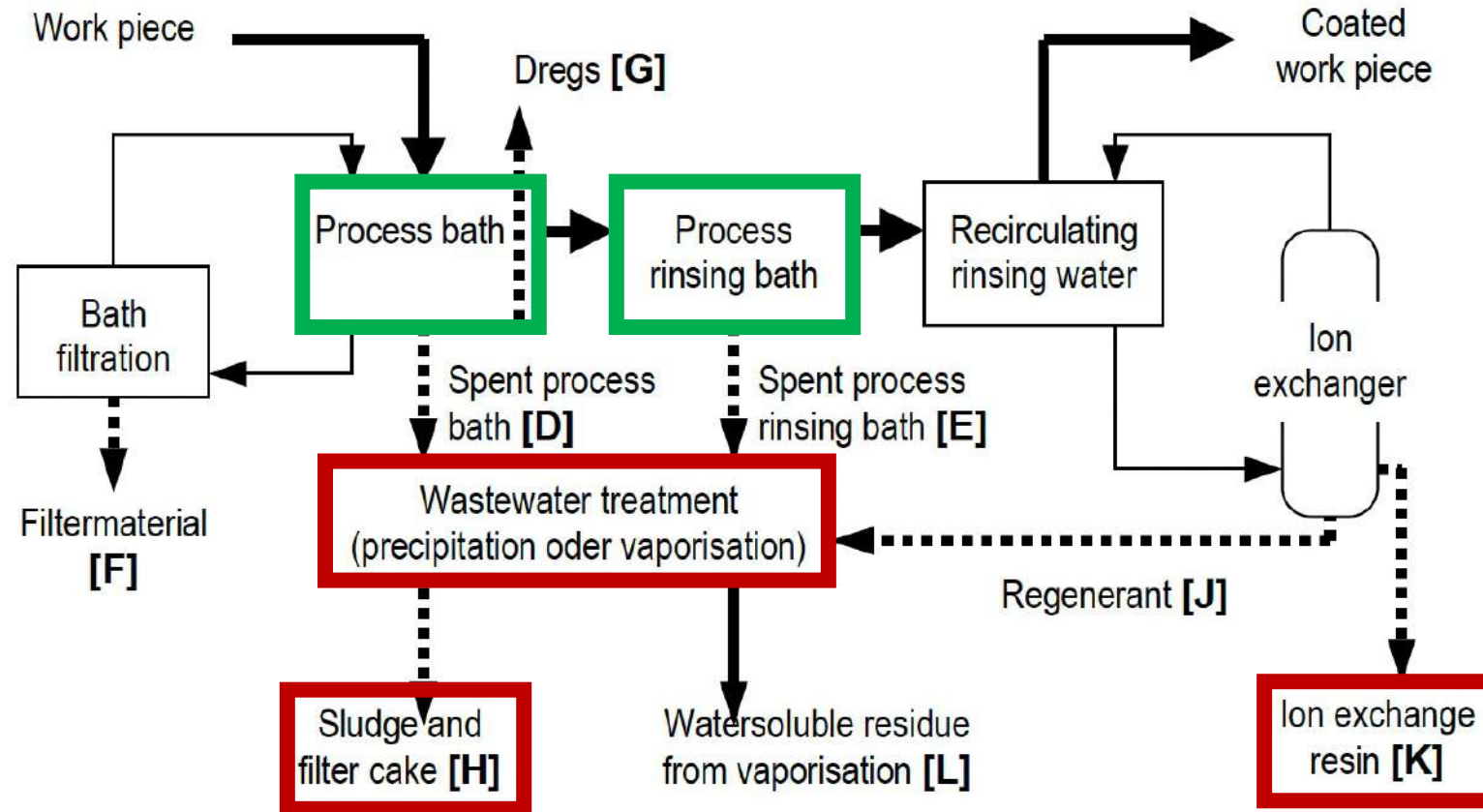
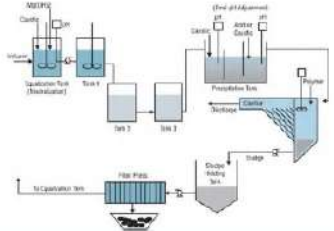
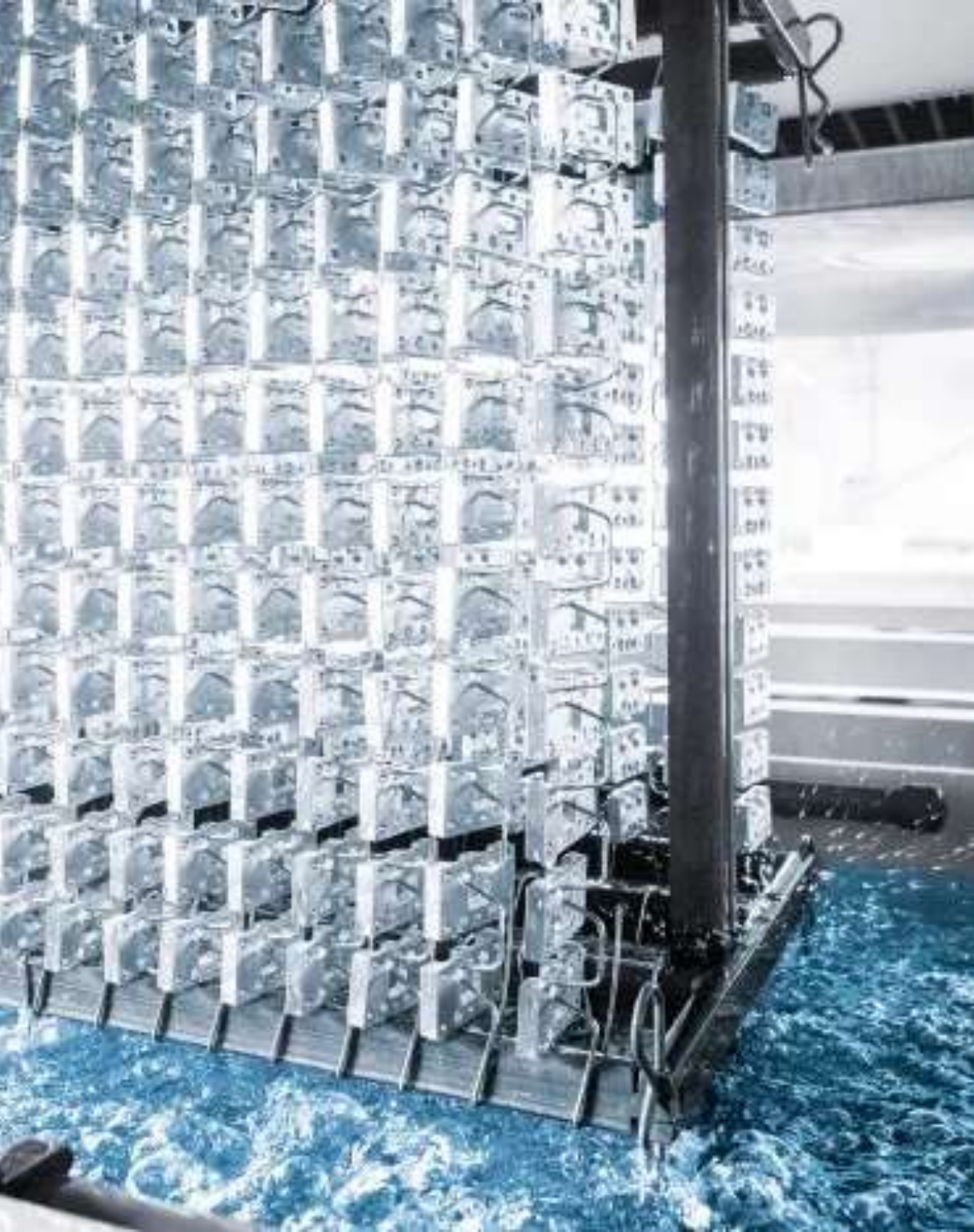


Fig 2: Waste production during wastewater treatment from chemical and electro-chemical metal treatment and coating

WHAT OPTIONS DO WE HAVE TODAY?

	Pros	Cons	
Electrowinning	Go to solution for the recovery of precious metals	Typical recovery up to 80% Tails with several hundreds of ppms are sent for disposal Strict match between bath chemistry and EW operations	
Chemical Physical Precipitation	Go to solution for the treatment of electroplating industrial wastewater	Zero or very limited recovery Multistep process High risk of penalties	
Third Party Disposal	Zero effort solution	Zero recovery High environmental impact	
Solvent Extraction	Very good for metal separation (i.e. Cu/Ni)	Used only at large scale facilities (refining sites) Not applicable to electroplating wastewater	



EVOLVIN PLATING BATHS COMPLEXITY

Dissolved Heavy Metals

Require multi-step removal to meet strict discharge limits

Stable Complexes (Chelators)

Chelated metals (ammonia, citrate, EDTA) resist precipitation, requiring advanced oxidation

Evolving Bath Chemistry

Additives (levelers, brighteners) reduce predictability + interfere with treatment processes

Stream Variability & Commingling

Dilution and variability hinder optimization and increase treatment complexity

Sludge Generation

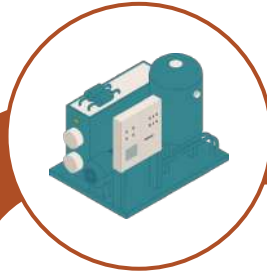
Generates hazardous waste requiring expensive disposal and handling

MORE COMPLEXITY? MORE DIFFICULT TO TREAT AND/OR DISPOSE



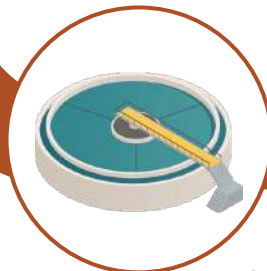
PLATING BATH

The more a bath is designed to maximize lifespan and performance, the more complex and difficult its chemistry becomes to manage.



PHYSICO-CHEMICAL PLANT

- Higher number of internal operations to neutralize or treat metals
- Greater risk of exceeding regulatory limits
- Increasing technical complexity



EXTERNAL DISPOSAL

- Higher disposal costs
- Dependence on external suppliers
- Economic risk in case of complex baths

MORE COMPLEXITY? ZERO PROBLEMS WITH CIRCULAR MATERIALS



PLATING BATH

Regardless of chemical complexity, our process treats baths with any metal and **concentration**, including hazardous reagents, recovering over 99% of materials and minimizing environmental impact.



CIRCULAR
VERSATILE
EFFICIENT

SWaP™
Supercritical Water Precipitation

**Recovering any metal
at any concentration.**

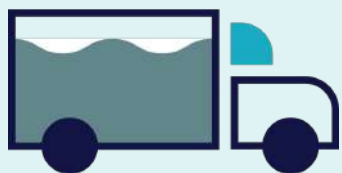
> 99% recovery rate.

**No special chemicals or
consumables.**

No hazardous sludges.



Inbound waste



Each batch of wastewater coming from our clients is tracked and analyzed in our facility.

Analysis & Optimization



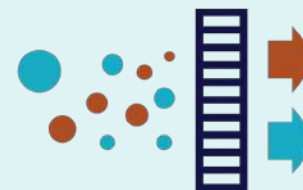
Our internal analysis defines the best recipe to maximize the recovery rate and energy efficiency.

SWaP



Wastewater is mixed with supercritical water in a continuous flow reactor forcing metals to cluster and precipitate.

Metal separation & Recovery



Metal particles settle cleanly and rapidly, allowing for easy separation and recovery.

Metal valorization



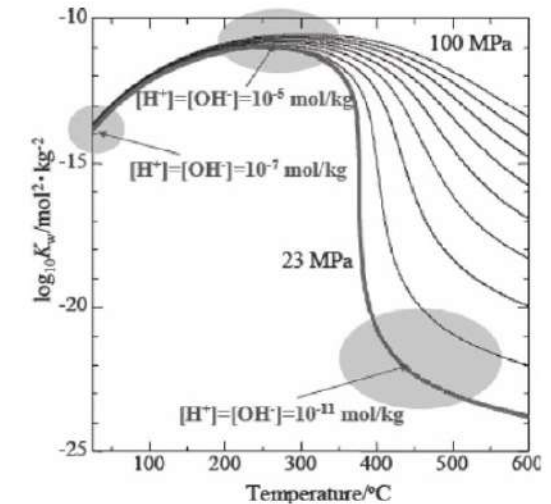
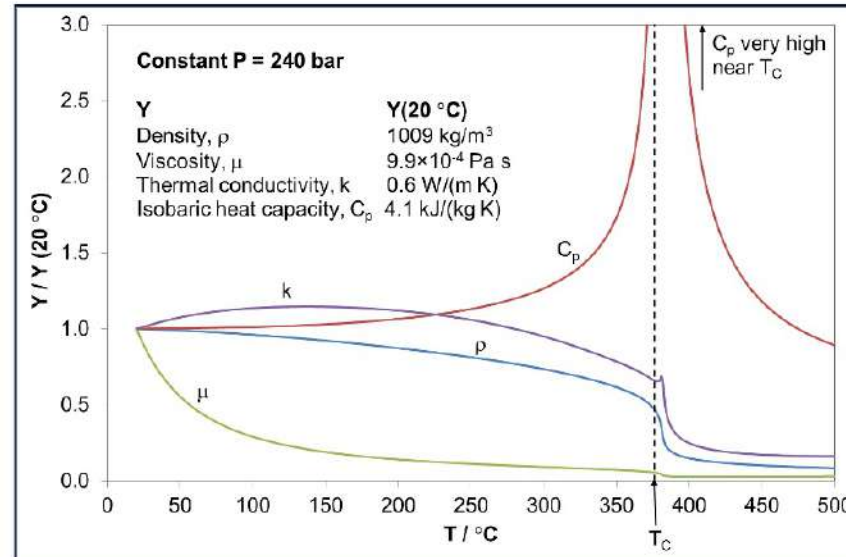
Recovered metals are converted into high-quality secondary raw materials. Water is freed of metals and can be reused.

FINE TUNING OF PHYSICAL VARIABLES THROUGH SMART ENGINEERING

Supercritical Water Properties

Dramatic change of properties near its critical point resulting in the reduced solubility of polar inorganic salts

- Decrease of the fluid density (ρ)
- Decrease of the dielectric constant (ϵ)
- Decrease in Water Equilibrium Constant (K_w)
- Increase in Heat Capacity (C_p)



Metal Precipitation

Supersaturation & Precipitation are triggered

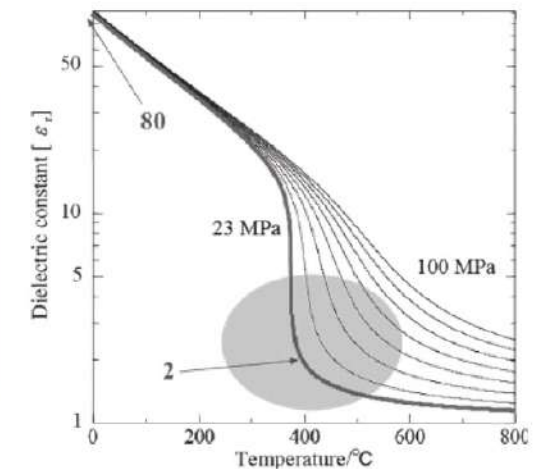
- by variation of the medium properties
- NOT by chemical reaction
- NOT by reagent addition
- NOT by pH/redox variation
- NOT by changes in ionic strength

Strong Oxidation Potential

Significant thermal and/or oxidative decomposition of organics and contaminants

Heat and Energy

SW is an excellent heat exchange fluid (high C_p), recovered and supplied via conventional heat exchangers technologies



STRATEGIC VALUE CHAINS



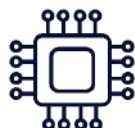
Chemical industry



Synthesis of pharmaceutical APIs (active ingredients)



Electroplating and galvanics



Semiconductor and electronics manufacturing



Metallurgical industry and refining



Defense and aerospace

110079

H

Hydrogen

369010

Li

Lithium

490102

Be

Beryllium

1121990

Na

Sodium

1226305

Mg

Magnesium

1939098

K

Potassium

2040078

Ca

Calcium

2144954

Sc

Scandium

2247867

Ti

Titanium

2350942

V

Vanadium

2451995

Cr

Chromium

2554938

Mn

Manganese

2655959

Fe

Iron

2758955

Co

Cobalt

2858939

Ni

Nickel

2963546

Cu

Copper

3065360

Zn

Zinc

3169723

Ga

Gallium

3272640

Ge

Germanium

3374973

As

Arsenic

3476669

Se

Selenium

3579104

Br

Bromine

3683796

Kr

Krypton

3785468

Rb

Rubidium

3887620

Sr

Strontium

3988906

Y

Yttrium

4091224

Zr

Zirconium

4192894

Nb

Niobium

4293958

Mo

Molybdenum

4395027

Tc

Technetium

4496050

Ru

Ruthenium

4597141

Rh

Rhodium

4698242

Pd

Palladium

4799361

Ag

Silver

4899611

Cd

Cadmium

4999861

In

Indium

5099832

Sn

Tin

5199894

Sb

Antimony

5299891

Te

Tellurium

5399893

I

Iodine

5499891

Xe

Xenon

5599894

Cs

Cesium

5699894

Ba

Barium

5799891

La

Lanthanum

5899891

Hf

Hafnium

5999891

Ta

Tantalum

6099891

W

Tungsten

6199891

Re

Rhenium

6299891

Os

Osmium

6399891

Ir

Iridium

6499891

Pt

Platinum

6599891

Au

Gold

6699891

Hg

Mercury

6799891

Tl

Thallium

6899891

Pb

Lead

6999891

Bi

Bismuth

7099891

Po

Polonium

7199891

At

Astatine

7299891

Rn

Radon

87223

Fr

Francium

88223

Ra

Radium

89223

Ac

Actinium

90223

Rf

Rutherfordium

91223

Db

Dubnium

92223

Sg

Seaborgium

93223

Bh

Berkelium

94223

Hs

Hassium

95223

Mt

Meitnerium

96223

Ds

Darmstadtium

97223

Rg

Röntgenium

98223

Cn

Copernicium

99223

Nh

Nihonium

100223

Fl

Flerovium

101223

Mc

Moscovium

102223

Lv

Livermorium

103223

Ts

Tennessine

104223

Og

Oganesson

589032

Ce

Cerium

599031

Pr

Praseodymium

609032

Nd

Neodymium

61903

Pm

Promethium

629032

Sm

Samarium

639032

Eu

Europium

649032

Gd

Gadolinium

659032

Tb

Terbium

669032

Dy

Dysprosium

679032

Ho

Holmium

689032

Er

Erbium

699032

Tm

Thulium

709032

Yb

Ytterbium

719032

Lu

Lutetium

9022304

Th

Thorium

9122304

Pa

Protactinium

9222303

U

Uranium

9322303

Np

Neptunium

9422303

Pu

Plutonium

9522303

Am

Americium

9622303

Cm

Curium

9722303

Bk

Berkelium

9822303

Cf

Californium

9922303

Es

Einsteinium

10022303

Fm

Fermium

10122303

Md

Mendelevium

10222303

No

Nobelium

10322303

Lr

Lawrencium

<

HOW WE WORK



PHASE I: MAPPING OF PROCESSES AND METAL- BEARING STREAMS

- Identification of metal-containing waste streams suitable for recovery, starting from Cu, Ni, Cr and PGMs
- Preliminary screening of technical and economic recovery potential through CER code analysis
- Sampling and laboratory analysis of selected effluents at Circular Materials facilities



PHASE 2: INDUSTRIAL TESTING AND VALIDATION

- Industrial trials on selected streams at CMH0 – Cadoneghe (PD)
- Technical and economic validation of the treatment service
- Assessment of ESG and LCA impacts



PHASE 3: BUSINESS CASE AND ESG VALORISATION

- Quantification of critical raw material recovery
- Economic business case vs conventional disposal
- Support for circularity strategy, traceability and sustainability for ESG reporting

FROM WASTE TO CRMS

Industrial Process	End-use sectors
Electroless nickel plating	Automotive, Oil and Gas, Aerospace, Defense, Machinery, Electronics, Tools, Food, Fashion, Furniture
PTFE (Teflon) nickel plating	
Electrolytic nickel plating	
Nickel stripping	
Acid copper plating (sulfuric)	Electronics, PCB, Fashion, Automotive, Mechanics, Aerospace, Defense, Agriculture, Furniture
Cyanide copper plating	
Nitric acid copper stripping	
Ruthenium acidic plating	Fashion, Furniture, Electronics
Ruthenium alkaline plating	
Chromium III plating (sulfate-based)	Automotive, Oil and Gas, Aerospace, Defense, Machinery, Electronics, Tools, Food, Fashion, Furniture, Pharma
Chromium III plating (acetate-based)	
Chromium VI plating	
Chromium stripping	



Nickel sulfate (NiSO_4)

Nickel oxide (NiO)

Nickel hydroxide ($\text{Ni}(\text{OH})_2$) Other organic or inorganic salts*



Copper sulfate (CuSO_4)

Copper oxide (CuO)

Other organic or inorganic salts*



Chromium sulfate ($\text{Cr}_2(\text{SO}_4)_3$) Chromium oxide (Cr_2O_3)

Other organic or inorganic salts*

Ammonium hydroxide (NH_4OH)



Through this collaboration, we have:

- Treated 11 m³ of industrial wastewater, including: 7 m³ of ruthenium acid effluents and 4 m³ of nickel-based effluents
- Achieved recovery rates of >90% for ruthenium and >95% for nickel
- Delivered the recovered ruthenium to Italrecycling for refining into secondary raw materials, later reintroduced into LEM's production cycle
- Supported the recovery of the first kilogram of ruthenium within the EU Critical Raw Materials Act (CRMA) strategic project
- Mapped 3 out of 6 production sites

« A shared vision in which every employee recognizes that waste, when properly managed, is not just a cost to be borne, but a resource to be enhanced, capable of generating both environmental and economic benefits for the company. »

Other aspects not to be overlooked:

- **Diversification of sources:** reduced dependence on the supply of virgin raw materials
- **Reduced environmental impact** – recycled metals vs. mined metals – preservation of land and ecosystems
- **Development of a new way of doing business, where supply chain transparency is closely linked to the reputation of major market players:** more conscious consumers → sustainable products → brand-driven demand → virtuous supply chains. This leads to greater reporting of ESG impacts and company classification through ESG ratings
- **Awareness and proactive alignment with increasingly stringent European standards** aimed at protecting the end consumer

Wastewater	Volume (L)	Extracted metal(kg)	Recovery (%)	Net impact per 1 kg of metal (kg CO _{2eq})	Net impact for total metal recovery (kg CO _{2eq})
Nickel phosphorus	2665	196	96.2%	- 271	- 53.120
Electroless Nickel	783	2.4	92.74%	- 153	- 370
Acid ruthenium	15059	2.5	87.44%	- 20.380	- 50.950

Argos Surface Technologies is an Italian industrial group and a leader in surface treatments and coatings – including nickel plating, anodizing, cataphoresis, industrial painting, polymers, metallization, and electroplating – for metals, plastics, and carbon fiber.



Our partnership

August 2024:

- inauguration our wastewater treatment plant & shipment of the first batch of nickel-containing effluents from Argos

2025:

- shipment of 34 batches of nickel-containing effluents
- mapping group sites, sample analysis, and technical evaluation
- start of recovery of nickel concentrate batches



Site	Mapping	Sample analysis	Technical evaluation	CMH0 treatment	Validated for CMH1
Calcio	Yes	Yes	Yes	Yes	Yes
Cambiago	Yes	Yes	Yes	No	Yes
Valsamoggia	Yes	Yes	Yes	No	Yes
Opera	Yes	Yes	In progress	-	-
Ciriè	Yes	Yes	In progress	-	-
Imola	Yes	In progress	-	-	-
Ag technical (Montanaso, Cavenago, Crema)	Yes	In progress	-	-	-
Origgio	Yes	No	-	-	-
Minerbio	Yes	No	-	-	-
Villanova	-	-	-	-	-

** Many facilities generate multiple types of wastewater, each requiring its own technical assessment and industrial testing.*

Through this collaboration, we have:

- Treated 43 m³ of industrial wastewater from electroless nickel and PTFE nickel processes, recovering over 95% of the dissolved nickel
- Reduced the environmental impact compared to traditional extraction and industrial wastewater treatment processes
- Recovered the first ton of nickel within the framework of the EU's CRMA (Critical Raw Materials Act) strategic project (just three months after Circular Materials' official designation, marking the first concrete CRMA result in Europe: recovery and reintroduction of nickel into the market)
- Mapped and analyzed relevant streams across all group facilities

Impact

Wastewater	Volume (L)	Extracted metal(kg)	Recovery (%)	Net impact per 1 kg of metal (kg CO _{2eq})	Net impact for total metal recovery (kg CO _{2eq})
Electroless and PTFE Nickel	7799	37,8	90.9%	- 125	- 4731
Electroless Nickel	22656	131	91.5%	- 207	-27114

* *Net impact is calculated as the sum of emissions generated by the Circular Materials precipitation process, minus the emissions avoided from virgin raw material extraction and conventional waste treatment.*

A POSITIVE ENVIRONMENTAL IMPACT

Circular materials vs **traditional process**: **CO₂ emissions avoided** in the recovery of 1 kg of metal and in the treatment of the corresponding volume of wastewater.

Nickel Oxide



-213 kg

CO₂ evitata

Copper Oxide



-59 kg

CO₂ evitata

Ruthenium



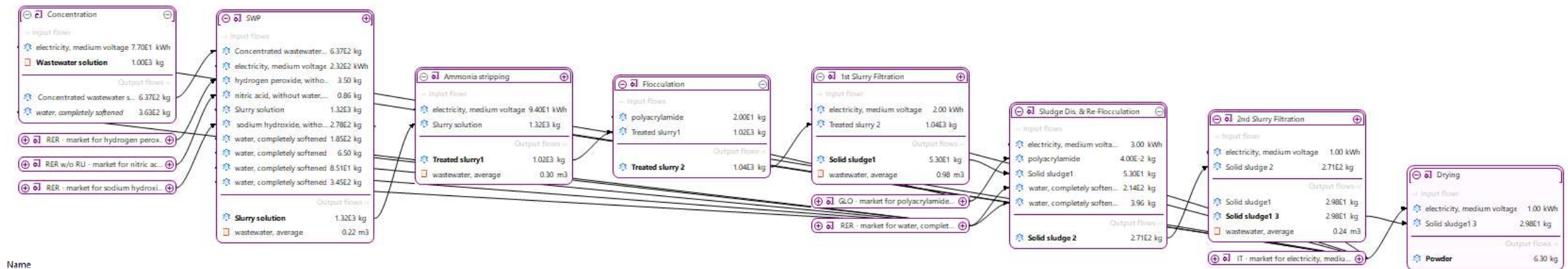
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-22050 kg

CO₂ evitata

LCA ANALYSIS AND SUSTAINABILITY



- Name
- > Acidification
 - > Climate change
 - > Climate change: biogenic
 - > Climate change: fossil
 - > Climate change: land use and land use change
 - > Ecotoxicity: freshwater
 - > Ecotoxicity: freshwater, inorganics
 - > Ecotoxicity: freshwater, organics
 - > Energy resources: non-renewable
 - > Eutrophication: freshwater
 - > Eutrophication: marine
 - > Eutrophication: terrestrial
 - > Human toxicity: carcinogenic
 - > Human toxicity: carcinogenic, inorganics
 - > Human toxicity: carcinogenic, organics
 - > Human toxicity: non-carcinogenic
 - > Human toxicity: non-carcinogenic, inorganics
 - > Human toxicity: non-carcinogenic, organics
 - > Ionising radiation: human health
 - > Land use
 - > Material resources: metals/minerals
 - > Ozone depletion
 - > Particulate matter formation
 - > Photochemical oxidant formation: human health
 - > Water use

**Dedicated in-house team for sustainability analysis of
Circular Materials' processes and partners.**

Examples from Surface Treatment Industry



Extreme recovery efficiencies from a large variety of metals and processes

Our current main segments are customers active in the functional plating of metals such as Ni, Cu, Sn and Cr as well as decorative plating of Au, Pd, Ru and other precious metals.

The objective is to provide them with convenient & sustainable recovery solutions of spent electroplating effluent streams.

Moreover, we generate a value stream from the recovered metals by placing them in the market as low carbon footprint Secondary Raw Materials.

We also valorize the ESG impact our clients' processes and products.

The application of CM technology results in the direct and efficient recovery of the different metals dissolved in the plating and rinsing baths from multiple surface treatment waste streams.



Plating of gold for fashion industry



Plating of copper for the electronics industry

Target Metal		INFLOW [mg/L]	OUTFLOW [mg/L]	Recovery Rate [%]
Ruthenium	Ru	564	1,3	99,4%
Palladium-Nickel	Pd	4700	18,7	99,2%
Rhodium	Rh	1160	4,7	99,1%
Gold Cyanide	Au	60	1	>99.9%
Palladium Cyanide	Pd	433	1	>99.9%

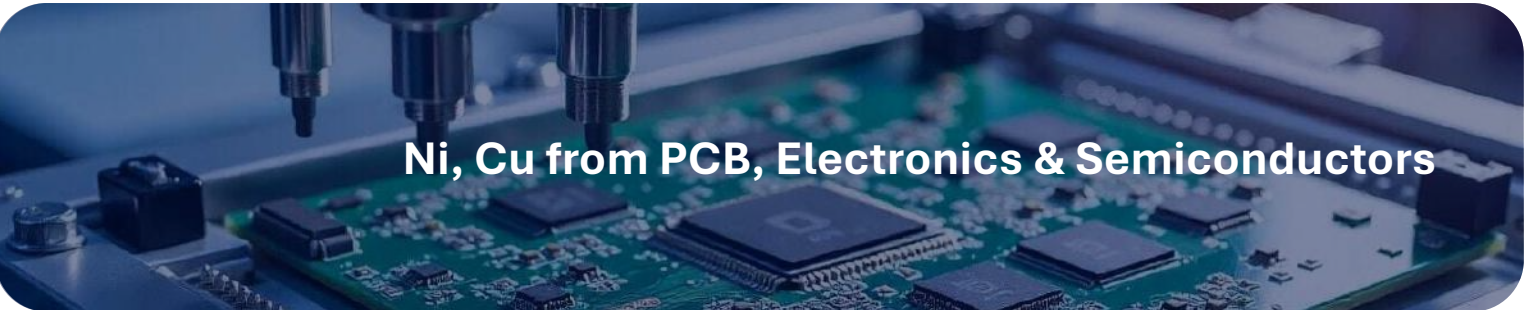
Target Metal		INFLOW [mg/L]	OUTFLOW [mg/L]	Recovery Rate [%]
Electroless Nickel	Ni	5500	24	99,6%
Nickel	Ni	60270	3	>99.9%
Copper	Cu	35263	1	>99.9%
Tin	Sn	20290	17	>99.9%
Chromium	Cr	123850	67	>99.9%



PGMs from Watchmaking



Cu from core removal process



Ni, Cu from PCB, Electronics & Semiconductors

**WHERE DO
WE KEEP
LOOSING
CRMs
TODAY?**



JOIN US TO **UNLOCK VALUE** **LOST IN WASTEWATER.**



FOLLOW US ON LINKEDIN!

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OUR TEAM



We recover what
the world **needs most**

Don't waste another drop.

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**CIRCULAR
MATERIALS**