



**ID 01**

## **Urbano rudarjenje**

### **Urban mining**

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#### **Povzetek**

Urbano rudarstvo se pogosto omenja predvsem v povezavi s ponovno uporabo plemenitih kovin kot so zlato, srebro, platina in ostalih redkih kovin, ki se pretežno uporabljajo v elektronski industriji. V praksi je koncept urbanega rudarstva mnogo širši in obsega tudi različne procese recikliranja (predelave in ponovne uporabe) tako posameznih komponent kot osnovnih elementov različnih proizvodov, industrijskih in stanovanjskih objektov ter različnih vrst odpadkov. Definicija temelji na konceptu Trajnostnega razvoja (Sustainable Development), ki izhaja iz predpostavke, da živimo v zaključenem Ekosistemu omejenem z viri, in industrijski ekologiji, ki preiskuje materialne in energijske tokove produktov ter procesov v industriji in ekonomiji. Cilji, ki jim model želi slediti se nanašajo predvsem na pridobivanje sekundarnih surovin, pridobivanje energije, sanacijo okoljskih bremen in škod, rehabilitacijo in ponovno uporabo zemljišč z odloženimi odpadki za druge namene ter zmanjševanje stroškov vzdrževanja in institucionalnega nadzora. Urbano rudarjenje je relativno nov model, ki se v praksi gospodarjenja z okoljem vedno bolj uveljavlja in nadgrajuje že preživet model na-koncu-cevovoda (end-of-the-pipe). V članku bodo predstavljene osnove modela in podane teoretične osnove za vrednotenje snovnega izločanja. V tem oziru ima uspešnost tehnoloških postopkov ali posameznih stopenj snovnega izločanja velik pomen, čemur pa v vsakdanji praksi gospodarjenja z odpadki management namenja premajhno pozornost.

**Ključne besede:** predelava odpadkov, recikliranje, urbano rudarjenje.

#### **Abstract**

Urban mining is often mentioned in connection with the re-use of precious metals such as gold, silver, platinum and other rare metals, which are mainly used in the electronics industry. In practice, the concept of urban mining is much broader and also includes various recycling processes (recovery and re-use) both individual components as the basic elements of the various products, industrial and residential buildings and various types of waste. The definition is based on the concept of sustainable development, which starts from the premise that we live in closed ecosystem with limited resources, and industrial ecology, which investigates the material and energy flows of products and processes in the industry

and the economy. Objectives which model wish to follow relate primarily to the acquisition of secondary raw materials, energy recovery, remediation of environmental burdens and losses, rehabilitation and release of land with deferred waste for other purposes, and a reduction in maintenance costs and the cost of institutional control of closed landfills. Urban mining is a relatively new model, which in environmental management practice gaining ground and upgrades already spend model end-of-the-pipe. This article will present the basics of the model design and provided the theoretical basis for the evaluation of the material of elimination. In this respect, the proper performance of technological processes or individual stages of the material separation play great importance, this in everyday practice waste managements pays insufficient attention.

**Key words:** waste treatment, recycling, urban mining.