

# GaIN (Green Irrigation)



***K-drip***

***Лентов канков  
маркуч за напояване***

***[www.k-drip.eu](http://www.k-drip.eu)***

The image features a promotional banner for K-drip. On the left, a blue and green graphic contains the text 'K-drip' in a stylized font, with a green leaf and a water drop icon. Below this, the text 'Лентов канков маркуч за напояване' is written in a blue, italicized font. On the right, a circular inset shows a close-up of a strawberry plant with a white flower, growing in a mulch bed with a black drip irrigation line. The website address 'www.k-drip.eu' is displayed in a blue, italicized font at the bottom right.

# *kaskada*

**Established in 1991 and has been operating on the market for polymer products for more than 25 years.**

**KASKADA Ltd. has a global presence in four main activities : production, distribution, polymer recycling and transport.**



**Norwegian consulting company focusing on Circular Economy, Green Energy, Entrepreneurship, Education & Social Inclusion, Manufacturing, SMEs, ICT and Innovation.**

## **Project Overview**

**The overall objective of the project “GaIN (Green IrrigationN)” is to increase the competitiveness of KASKADA Ltd. by introducing a new innovative product on the markets (irrigation pipes that are produced from 80% recycled compound) by applying an innovative green production process in KASKADA Ltd. based on the circular model.**

**Duration: 1 November 2019 – (30 April 2022) 30.10.2020**

**Budget: 1 944 000 Euro**

**Grant: 700 000,00 Euro**

**35,83 % of the eligible cost on the project**

## **Project outcomes**

**As a result of implementing the project the following outcomes were achieved:**

- increased competitiveness of KASKADA Ltd.**
- Enhanced business cooperation between Bulgaria and Norway**
- Introducing of innovative green product (drip irrigation pipes that are produced from 80% recycled polymer) and**
- Introducing of innovative green process (circular economy approach in the production process of polymer drip irrigation pipes).**

## Project outputs

**As a result of implementing the project the following outputs were achieved:**

- **Extending existing recycling process of used irrigation pipes and introducing to new for KASKADA Ltd. irrigation drip tape extrusion line.**
- **Improve material efficiency by using an innovative material for production of polymer irrigation pipes that is a result of 80% recycled materials.**
- **Increasing of re-use of recycled materials by reorganizing the production and operational process in KASKADA Ltd. the context of circular economy.**

## Project activities

**ACTIVITY 1. Assessment of product performance in the context of  
circular economy**

**International Development Norway delivered**

**ASSESSMENT OF PRODUCT PERFORMANCE IN THE CONTEXT OF A  
CIRCULAR ECONOMY, SUPPORTED BY LIFE CYCLE ASSESMENT**

**The report also include recommendation of sustainable branding, based  
on the delivered Life cycle assessment**



## Project activities

### ACTIVITY 2. Purchase, Installation and commissioning of the new irrigation drip tape extrusion line. KASKADA Ltd.

- Extruder
- Gravimetric dosing and mixing system
- Stripe making extruder
- Slitting system with cutting tool
- Laser printer
- Production control system



## **Project activities**

### **ACTIVITY 3. Project management**

**Project management team is assigned. The main objective of this activity is to ensure on time the budget and to follow the quality requirements for the implementation of all project activities.**

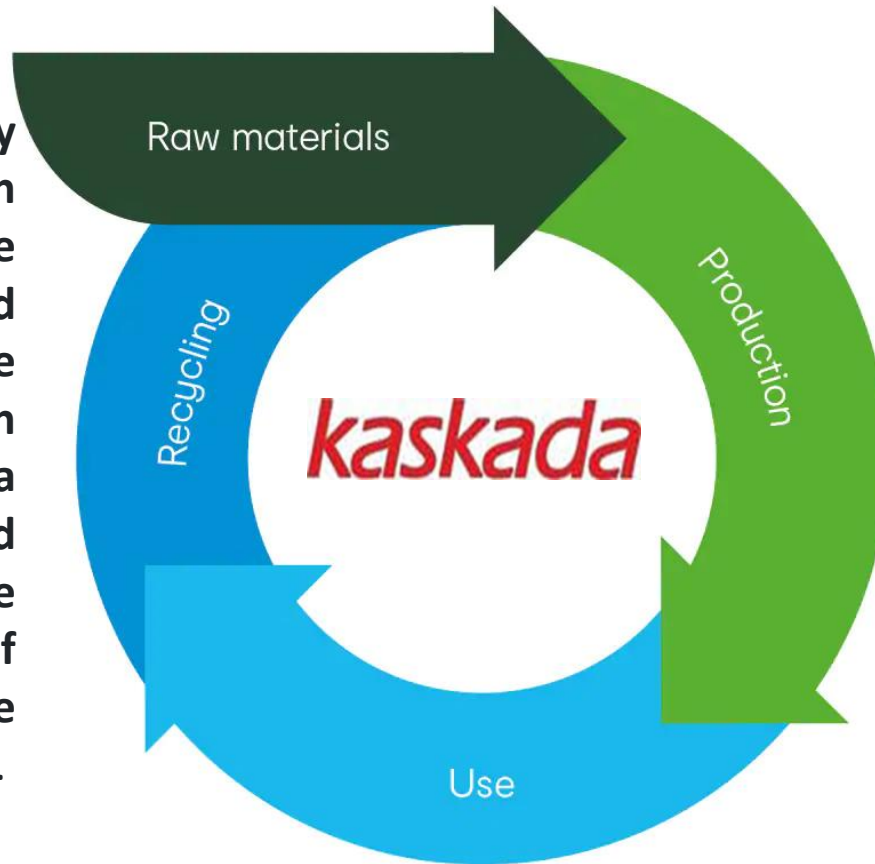
### **ACTIVITY 4. Publicity and communication**

**KASKADA Ltd. and Innovation Development Norway will implement all necessary project publicity measures according to Communication Guidelines – Implementation of Projects, Norwegian Financial Mechanism 2014-2021**



# Circular economy

Based on the many years experience in the field of prime and recycled polymers, we developed own recipe for a polymer compound to be used for the production of a drip tape irrigation pipe.



Irrigation pipes that are produced from 80% recycled compound

K-drip Tape Hose, guaranteeing and ensuring its taking back once it is out of use.