

Field Study Tour
16 > 19 of November 2017

Road Map



Rurener

Network of rural territories

Cyprus

About the organizers



RURENER is a European network of rural stakeholders committed to the energy transition. Our vision is to build a European Union self-conscious of the potentials of its territories, and especially its rural territories, to realize the energy transition. By addressing energy challenges, we promote a transversal approach of rural development. Through our members' experiences, we advocate for the crucial role of rural territories in achieving the energy transition in Europe, and we unite rural territories' voice to make it heard and acknowledged in Brussels. The network is a privileged place to share good practices, transfer knowledge and build cooperation projects with European partners. RURENER members are communities and other territorial entities, networks, organizations and individuals, from all over Europe. This diversity reflects our vision of a plural rural Europe.



ΠΕΡΙΦΕΡΕΙΑΚΗ ΕΝΩΣΗ ΣΥΝΔΕΣΜΩΝ

ΑΠΟΔΗΜΩΝ ΠΙΤΣΙΛΙΑΣ Π.Ε.Σ.Α.Π.

PESAP - The Regional Union of former residents Associations of Pitsilia is the coordinating body of former residents Associations from 30 Communities in the region of Pitsilia, in both the Nicosia and the District of Limassol. The Pitsilia area is a mountainous area, the largest of Troodos system and the communities are all located at an altitude of over 800 meters. The isolated area is in decline demographically and economically and lacks a good road network connecting the area to the main urban areas. It is also lacking in terms of health, education and social services. Individual associations of former residents communities in the Pitsilia region decided to join forces and together with other local organizations to join forces to rejuvenate the region.

Macéo is an organization of public and private actors joining forces in order to boost the development, encourage innovation, reinforce attractiveness and strengthen the influence of the Central mountain chain of France (Massif Central). With about 80 members in 2017, the organization has a strong governance model, composed of the raw forces of rural territories: municipalities, businesses, research institutes, associations, and citizens located within its area of action. Macéo mobilizes its members and partners for collaborative and innovative projects at the local or interregional level. Macéo also supports members' projects thanks to its expertise and through its partnerships with local, national or European networks, like RURENER in the domain of rural energy.



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Cyprus

... A bit of history

Cyprus won its independence in 1960. At this time, agriculture – mainly for subsistence – was at the heart of Cypriot's economy. While declining through the 1970s, a third of the population was still employed in the agricultural sector.

In 1974 the island was divided between the Turkish Republic of Northern Cyprus, only recognized by the Turkish government, and the Republic of Cyprus that joined the European Union in 2004. This division impacted the agricultural sector and resulted in high unemployment rates in the Republic of Cyprus. The cities grew steadily and a lot of people left the rural areas to find new opportunities.

In the 1990s, the tertiary sector grew tremendously, but, supported by the government, agriculture remained strong and a large part of Cyprus' population still lives in rural areas.

The Republic Of Cyprus

Numbers

840 400 inhabitants

123,4 inhabitants/km²

5 896 km²

33,16% of the population is living in rural areas (in comparison, 20,25% in France, 21,67% in Greece and 28,33% in Hungary)



Context in Cyprus

Being surrounded by the sea, Cyprus is in a position of isolation for its electrical grid and of dependence towards fossil fuels imports. This situation increases Cyprus' vulnerability and energy expenses.

Since 2014, the production of electricity produced from renewable sources increased at an unprecedented pace in the world, and Cyprus is largely taking part in the dynamic, **developing renewable energies (RE)** on its territory.

The island benefits from a **very rich environment and many possibilities for renewable energy production (solar, wind, biomass)**. The development of local RE production plants increases the value of local resources, and maintains economic repercussions within the island.

Energy strategy

In 2013, an energy mix statement reveals that 94% of gross inland consumption in Cyprus comes from petroleum and products, and the remaining 6% from renewable sources. This statement highlights **Cyprus' dependence on fossil fuels imports and the necessity to shift gears**. Today, Cyprus is largely investing in renewable energies and the country became a **pioneer for solar thermal and concentrated solar power technologies (CSP)**. Current projects focus on solar (PV, thermal, CSP), wind power, biomass and biogas. In addition to renewable energy production, Cyprus set ambitious **energy targets for 2020 and 2030** to improve energy efficiency and energy savings. The energy transition is underway, for an integrated and sustainable approach of rural development.

The Troodos Mountains

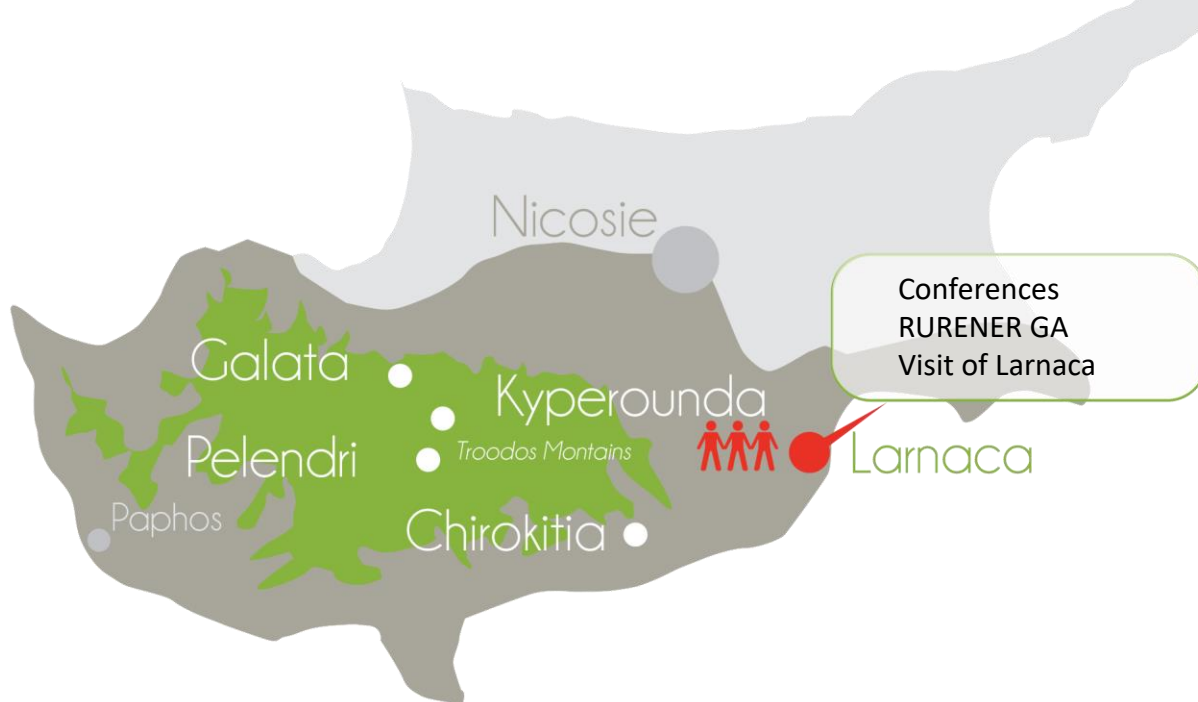
The Troodos Mountains are located at the heart of the island and highlight the stakes of rural development in mountainous areas. Troodos National Forest Park, overlooked by Mount Olympus with its 1,952m high, and the whole Troodos area, have a lower population density than the coastal areas of Cyprus (where the bigger cities are). East of Mount Olympus is the Pitsilia region, encompassing around 30 villages that have to face new sustainability challenges. On the one hand, the **natural and cultural heritage must be preserved**, hence the development of eco-tourism. On the other hand, the development of the region entails increased **needs in energy and infrastructures**. An **integrated development plan is necessary to ensure the flourishing of the region**, as promoted by the Peripheral Union of Former Residents (Apodimoi) of Pitsilia (PESAP).



Troodos in number

Rural mountainous
territory

Surface: 9 337 hectares,
of which 220 hectares of
nature reserve



Larnaca

Capital city of the district of Larnaca and largest city of the Republic of Cyprus, with 72 902 inhabitants



Program days 1 & 2

6

Thursday 16th of November # day 1

- **14h-19h** > Arrival in Larnaca – International Airport
> *shuttle transfer to the hotel*
- **20h30** > Welcoming dinner
- **23h00** > Back to the hotel

Friday 17th of November # day 2

- **9h00 - 13h00** > Conferences and round table discussion (at the hotel)
- **13h00 - 16h00** > Lunch (at the hotel) and visit of Larnaca
- **16h00 - 19h00** > RURENER General Assembly (at the hotel)
 - **20h30** > Dinner
 - **23h00** > Back to the hotel

Hotel

Palm Beach hotel and
Bungalows
P.O.Box 40394, Oroklini CY
6303, Cyprus
+357 24846600
info@palmbeachhotel.com

Day 1

Dinner

Lyssia Meat Tavern
Dhekelia Road 4 | Pyla coasta
strip, Larnaka City 7081
+357 24 644588

Day 2

Dinner

Vlachos Tavern
Kantaros 10, Larnaca 7081
+357 24 644244

Conferences and Round Table Discussion 09:00 > 13:00

09:00 – 09:10 Registration

Welcoming of participants and opening addresses

09:10 – 09:20 Christos Eliades, President of Board of Directors of PESAP

09:20 – 09:30 Tibor Köcse, RURENER President

SESSION I : Energy Challenges for Cyprus & the Case of the Troodos Region

Chair: Prof. Vassiliki Kazana

09:30 – 09:50 **Energy Challenges for Cyprus**
Iosif Spyrides, Energy Inspector - Energy Service, Ministry of Ministry of Energy Commerce, Industry and Tourism

09:50 – 10:10 **Energy transition and options for Cyprus**
Dr Venizelos Efthymiou, Chairman - FOSS Research Centre, University of Cyprus

10:10 – 10:20 **Integrated Development Plan of the Troodos Mountains**
Kyriakos E. Georgiou, Engineer, Economist - PESAP & University of Nicosia

10:20 – 10:40 Coffee break

SESSION II : Pilot Projects

Chair: Dr Venizelos Efthymiou

10:40 – 11:00 **Local Energy Actions for Sustainable Development in the Rural Areas of Cyprus**
Maria Achilleos. Architectural Engineer - Cyprus Energy Agency

11:00 – 11:20 **Applications for sustainable rural areas**
Anthi Charalambous, Head of Energy & Environment Service - Cyprus Employers and Industrialists Federation

11:20 – 11:40 **The Orites Wind Farm: From Conception to Operation**
Neofytos Constantinou, O&M Manager - Orites Wind Farm

Round Table Discussion: European and Local Challenges and the Way Forth

Chair: Kyriakos E. Georgiou

11:40 – 13:00 Christos Eliades, Dr Venizelos Efthymiou, Tibor Köcse, Aline Brachet, Prof. Vassiliki Kazana, Gérard Peltre

Lunch and visit of Larnaca > 13:00 – 16:00

- Larnaca Salt Lake
- Hala Sultan Tekke Mosque

RURENER General Assembly > 16:00 – 19:00

16:00 – 17:50

Chair: Tibor Kócse

Speakers: Aline Brachet, Philippe Cortès, Vassiliki Kazana, Tibor Kócse, Gérard Peltre, Céline Seince, Etienne

Viénot

-
- Overview of the network
- 2016 Activity Report
- 2016 Financial Report and budget 2017
- 2017 activities and current project:
 - Presentation of Etienne Viénot (French Regional Energy and Environment Agency - AURAE) :
 - Monitoring evaluation of impacts, example the CESBA Alps project
 - Presentation of Gérard Peltre, president of Rurality Environment Development, and European Countryside Movement :
 - For a European Rural Agenda post 2020
 - Perspectives and action plan
- Votes

17:50 – 18:50

Workshop: Building European cooperation

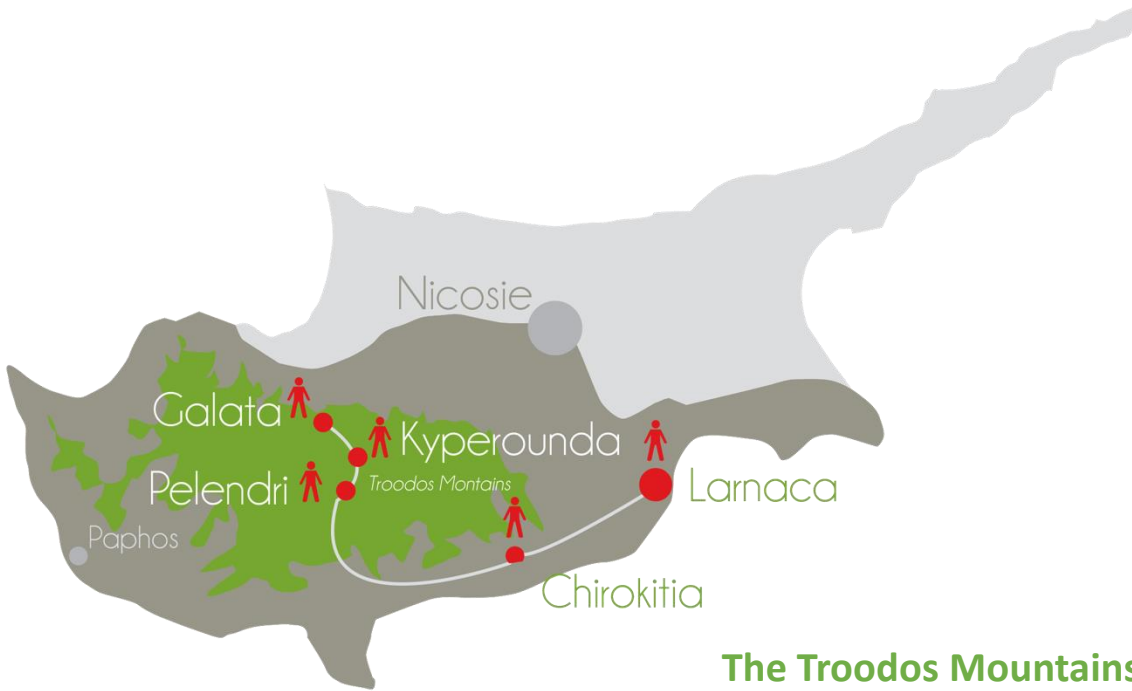
18:50 – 19:00

Closing remarks

Tibor Kócse, RURENER President

Christos Eliades, President of Board of Directors of PESAP





The Troodos Mountains,

have many similarities with other European mountain chains. Mountainous areas have to face similar barriers to take advantage of their great potential. They benefit from different kinds of resources:

- Natural resources: land, sun, wind, biomass...
- Human resources: communities attached to their land, willingness to contribute to its sustainable development, innovative ideas...
- Cultural resources: traditions, architecture, clothing, food...

But they also face have restrictive constraints:

- Isolation: constraints for mobility, reliance on imports...
- Low population density leading to low means for its development.

The island environment emphasizes all of these dimensions. The isolation of the island may have preserved local resources and practices, but also it also induced a dependence on imports even greater. We rarely take Cyprus as an example for innovations in rural energy - maybe because it seems so isolated - while **Cypriots have initiated very innovative projects to respond to the 21st century's energy and climate challenges.**

Program days 3 & 4

10

Saturday 18th of November # day 3

- **08:30** > Departure from the hotel
 - > Visits of Renewable Energy Production Sites
 - > Cultural visits
- **13h00** > Lunch in Pelendri
 - > Visit of Tsiakkas winery
- **19h30** > Back to Larnaca
- **20h30** > Dinner
- **22h30** > Back to the hotel

Sunday 19th of November # day 4

- Departure - according to your flights



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Day 3

Lunch in Pelendri

Dinner

Mer Bleue (Larnaca)

Mesopotamias Str.

8 | Philippou Bldg, Oroklini,

Larnaka City 7041, Chypre

+357 24 648110

Visits of Renewable Energy Production Sites

Small scale solar and wind power plants

Cyprus has great potential for solar and wind power generation and both large and small scale power plants have been developed in the recent year. We will be visiting small solar and wind power plants in the Larnaca and Nicosia districts on our way to the Troodos region. We will learn about the different steps to build the projects, from conception to operation of the facilities, the financial framework of the projects and viability.

Cypra Anaerobic Digestion Plant

Cypra owns a proven waste to energy technology producing annually 16 million kilowatt hour of electricity and 15 million kilowatt hour of thermal energy (heat) by reducing organic waste from slaughterhouses, butcheries, supermarkets, fisheries, hotels, restaurants, etc, to zero waste. The organic waste after digestion produces composting material, liquid ammonia fertilizer, and irrigation water. The digester has a capacity of 14 000m³, with a biogas production capability of 20 000m³ per day and up to 50MW of electricity. The initial investment was 12 million € and, with Cyprus' feed-in-tariff, the payback period is 4-5 years.



Cultural visits

Cultural heritage in Cyprus:

A rich culture mixing different influences: If the energy landscape is in transition in Cyprus, the cultural heritage is well preserved with many sites registered as UNESCO World's Heritage Sites.

Choirokoitia Neolithic Settlement

The archaeological site of Choirokoitia is a remarkably well-preserved settlement from the Neolithic Age that has been listed as a UNESCO World Heritage Site since 1998. Five characteristic cylindrical shaped dwellings have been reconstructed near the settlement, using the same construction methods and materials used in Neolithic times. The vegetation around the dwellings consists of native plants and trees that have grown in Cyprus since Neolithic times.

Galata Panagia Podithou

Located in the village of Galata, the church of Panagia Podithou once belonged to a monastery. The church was built in 1502; it is a single-aisled building with a steep-pitched timber roof. A later portico surrounds the three sides of the church, with the roof sheltering both the church and portico.



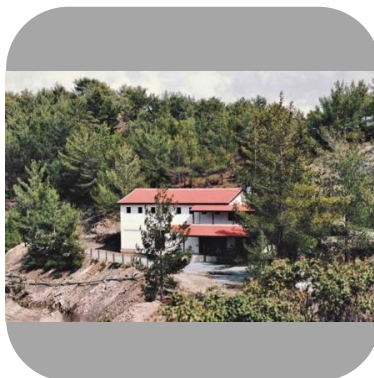
Lunch in Pelendri and exchanges with a local association

Pelendri Church of Holly Cross

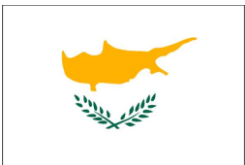
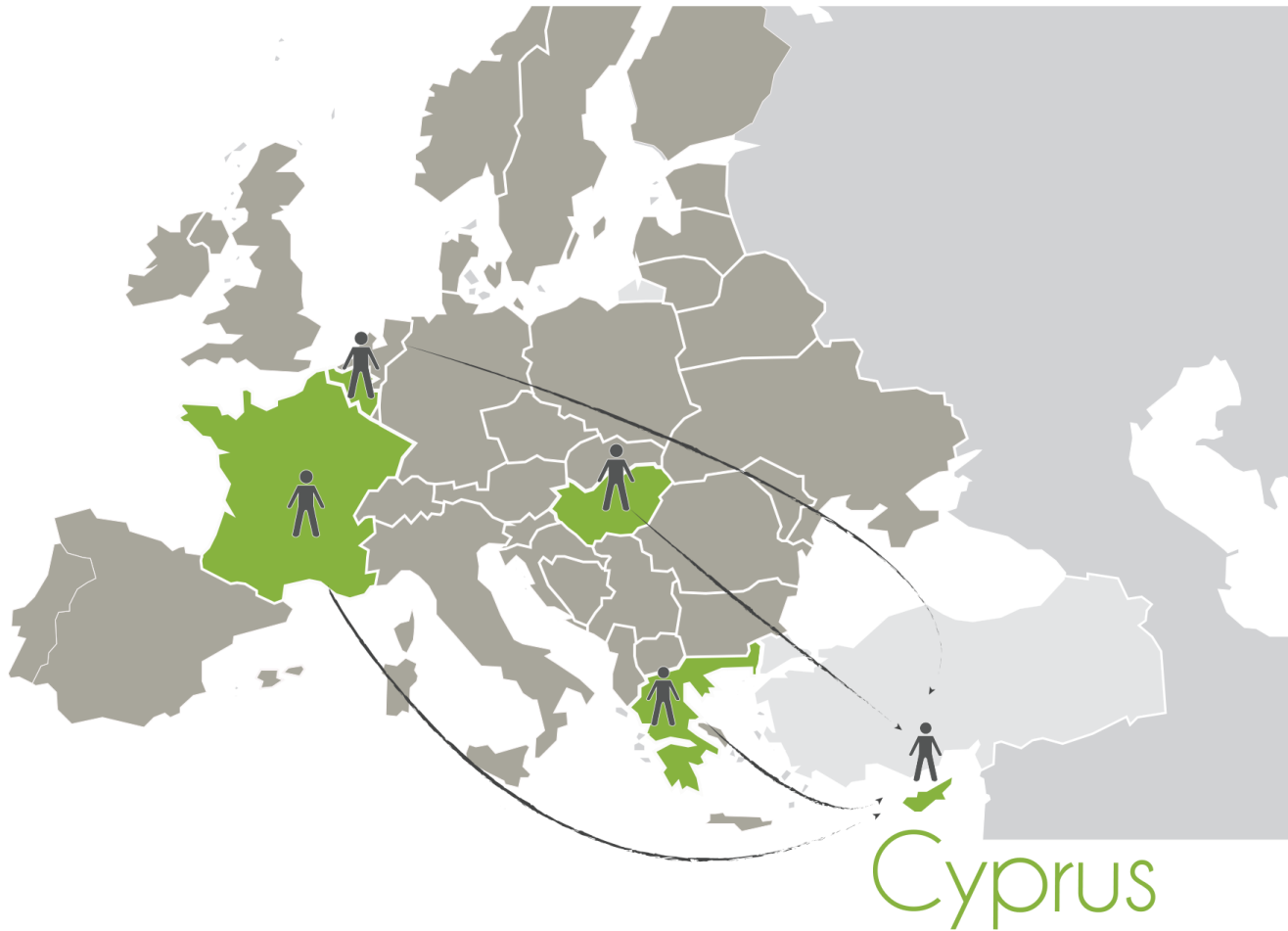
In the central part of Cyprus, in the mountains of the Troodos range, some of the most important monuments of the history of Byzantine painting have survived. The church of Timios Stavros is situated in a central area of the Troodos mountains, at the south end of the village of Pelendri, which is attested in the sources since the late 12th century.

Visit of Tsiakkas winery

Tsiakkas winery was established in 1988 just outside Pelendri village on the Troodos Mountains, in the Pitsilia wine region, in an effort to revive the grandfather's trade which was not practiced for more than 20 years. The first year's production was 500 bottles of a red wine called Thyrsos. The wine was made from **the local variety** Mavro Ambelissimo and Vamvakada. Gradually new wines were made with the addition of a white and a rose wine. The very first wines were made from local varieties as the international varieties were almost nonexistent in the Pitsilia region. In the late 90s, more and more international varieties were used to make the wines of the winery. These varieties included Chardonnay, Sauvignon, Cabernet, Merlot, Mattaro, Grenache and even Riesling for some years. Although some of these varieties are still used by the winery, in the recent years, there is a **shift towards Cypriot varieties**. Old forgotten varieties are replanted and more research was done on the widely planted Xynisteri and Vamvakada, both in the vineyard and the winery.



Participants 14





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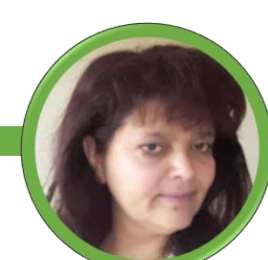
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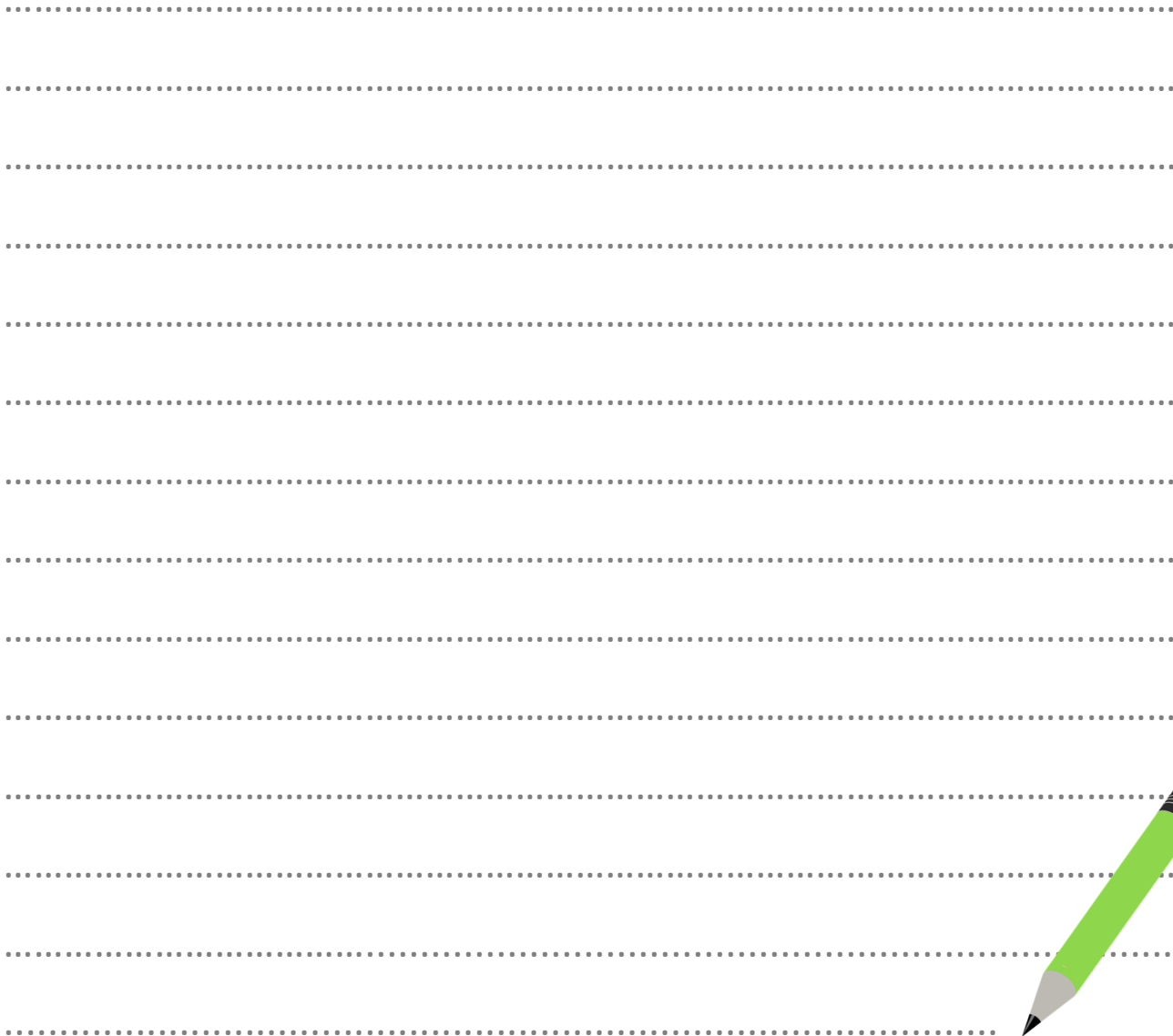
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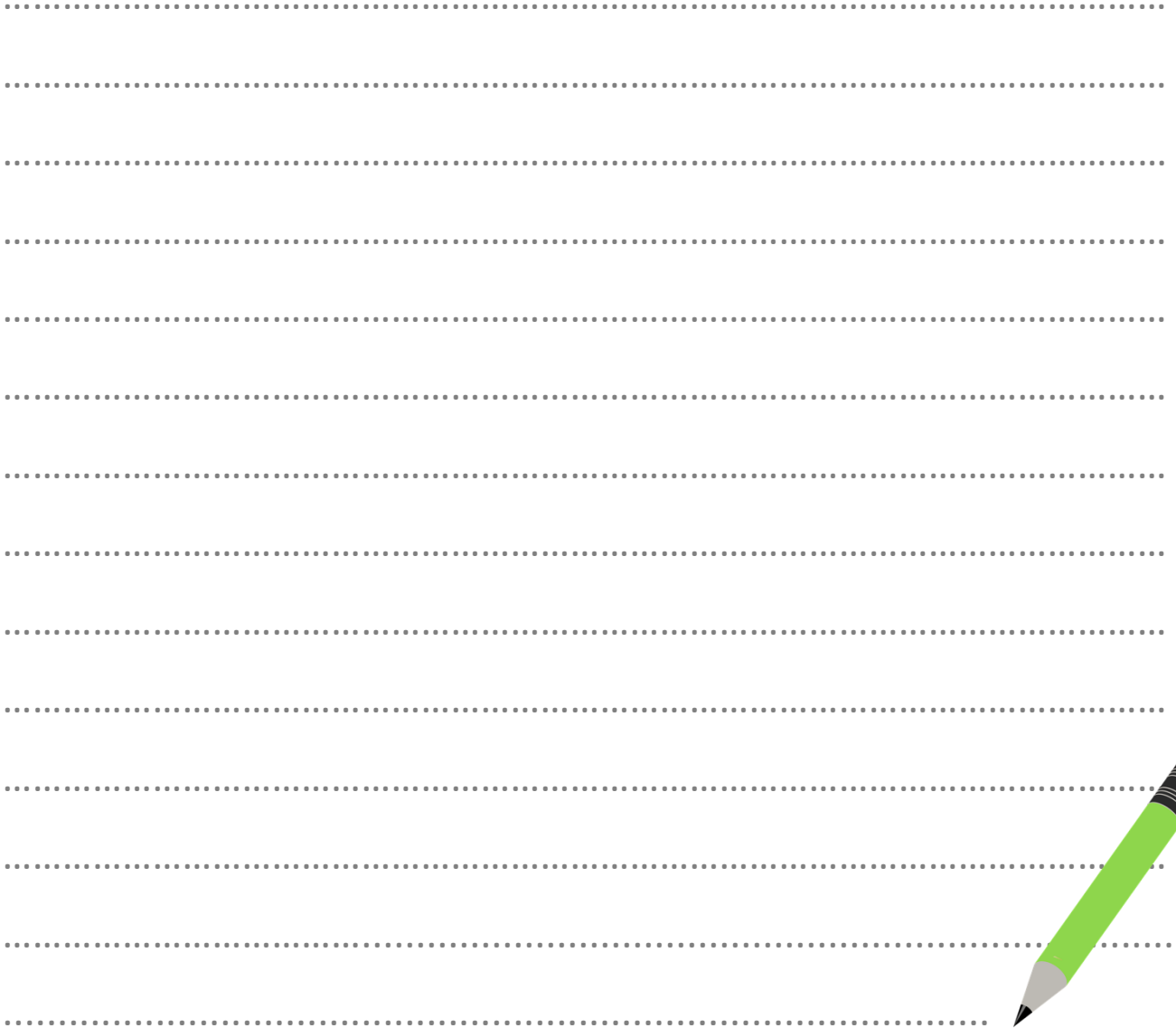


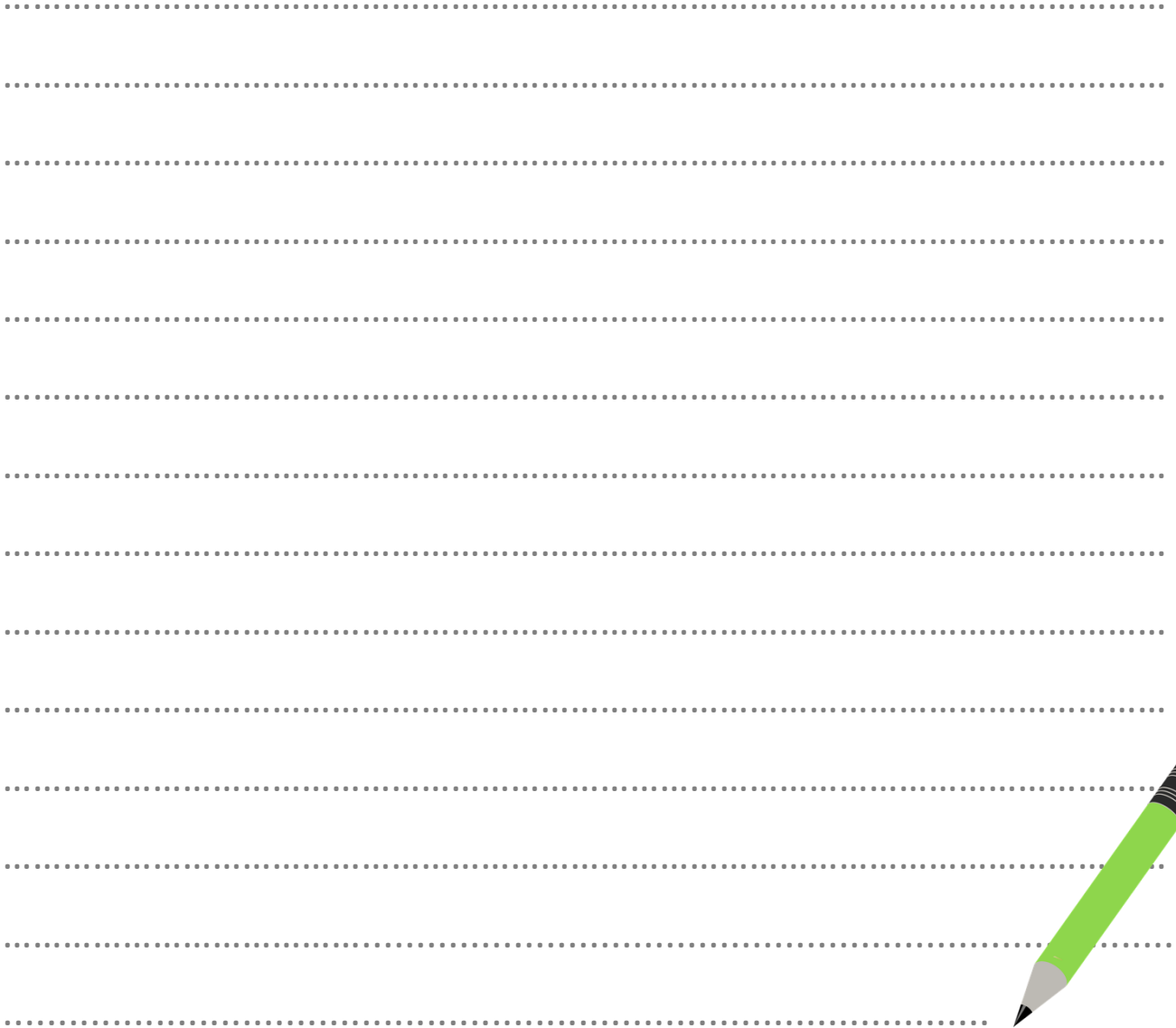
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