

*Conference*  
“Renewable energy and spatial planning: challenges and future perspectives”

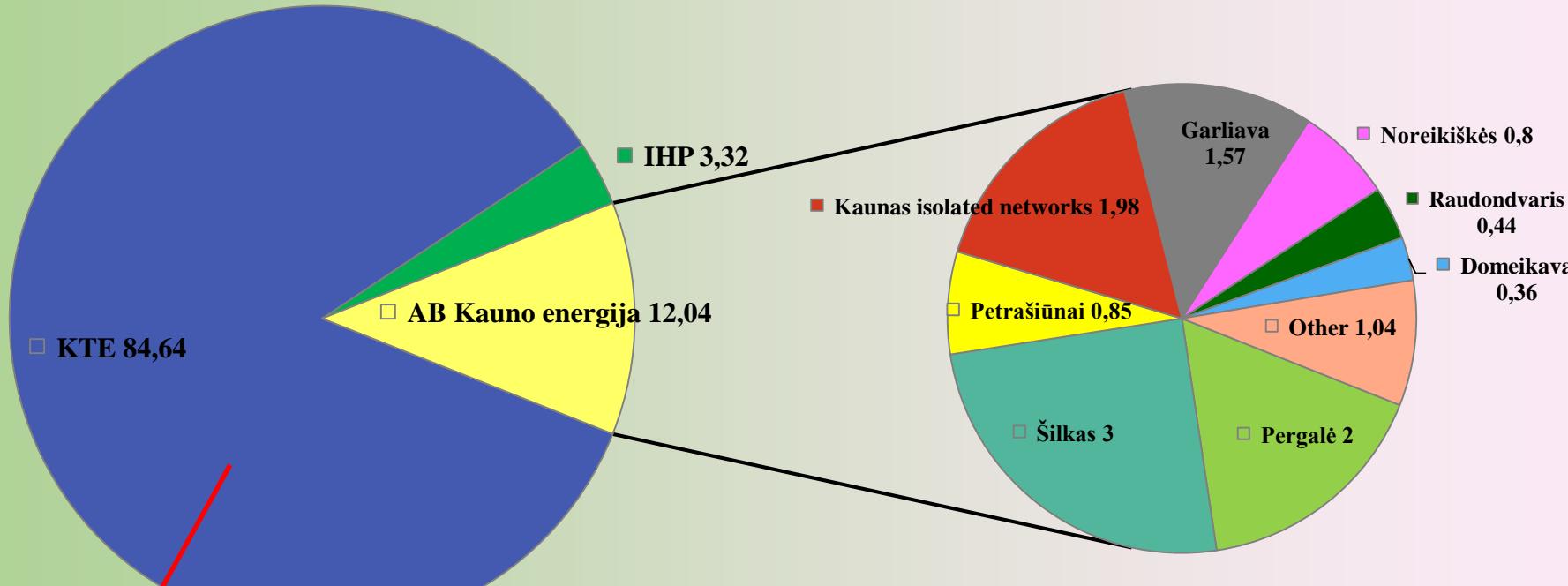
## **EXPERIENCE IN DEVELOPING THE USE OF BIOMASS IN DISTRICT HEATING OF KAUNAS CITY**

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PRESIDENT OF LITHUANIAN THERMALTECHNOLOGY ENGINEERS ASSOCIATION  
(FROM 2008 - TILL 2018 DECEMBER - GENERAL DIRECTOR OF AB KAUNO ENERGIJA)

2019  
RIGA/JELGAVA, LATVIA

# (INFORMATION PREZENTED IN RIGA AT 2013)

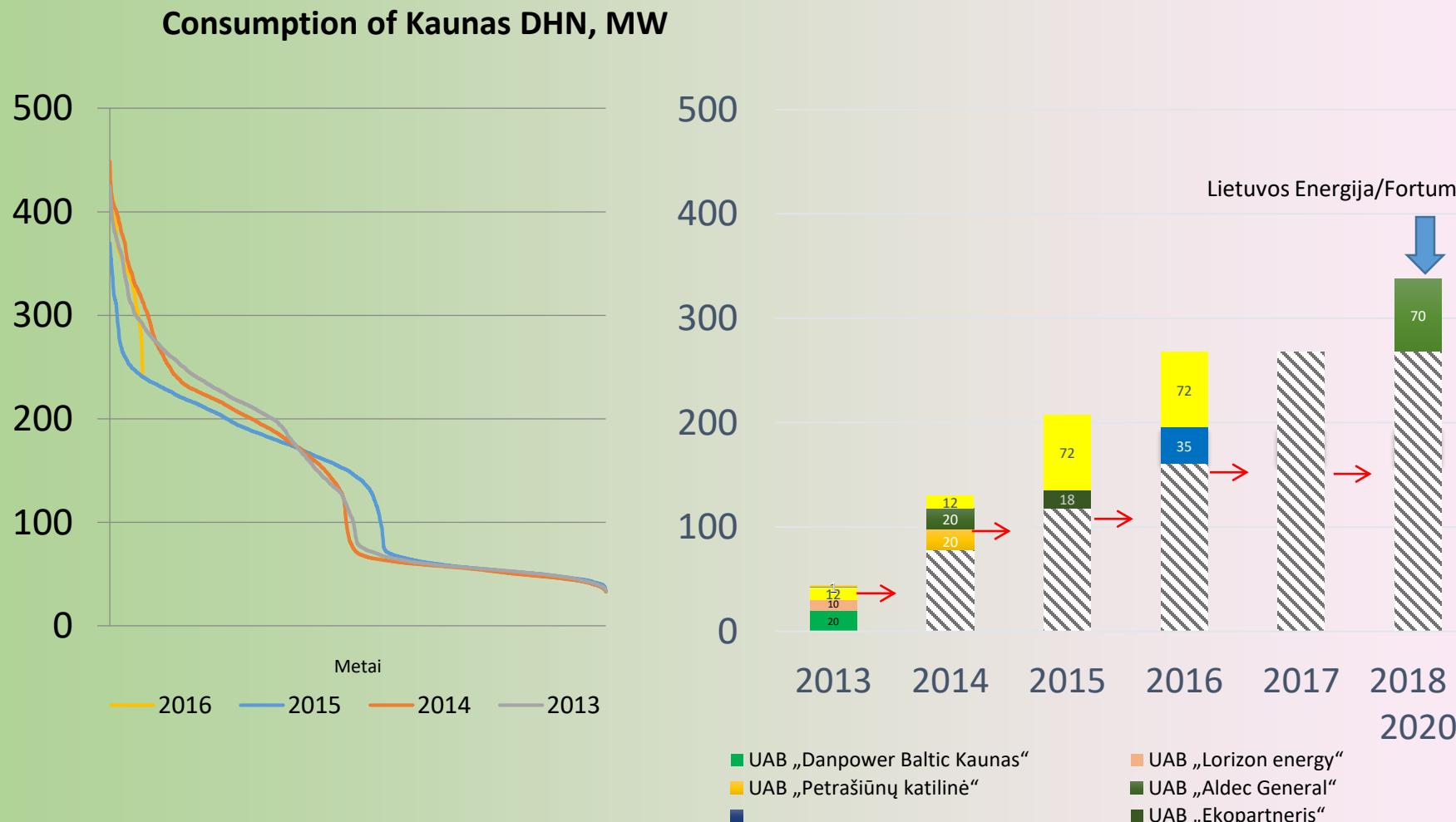
Ratio of the heat, produced during the year 2012 by AB Kauno Energija, UAB Kauno Termofikacijos Elektrinė (KTE) and independent heat producers (IHP) (percentage)



95 % of heat, consumed in  
Kaunas integrated network,  
was produced by KTE

<b>KTE 84,64</b>	<b>IHP 3,32</b>
<b>AB Kauno Energija</b>	
<b>Kaunas integrated networks:</b>	
■ Pergalė 2	
■ Šilkas 3	
■ Petrašiūnai 0,85	
<b>Kaunas isolated networks: 1,98</b>	
<b>Kaunas district networks:</b>	
■ Garliava 1,57	
■ Noreikiškės 0,8	
■ Raudondvaris 0,44	
■ Domeikava 0,36	
■ Other 1,04	

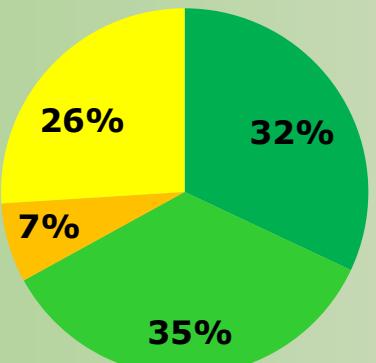
# Biofuel boilers capacities: AB Kauno Energija and IHP at 2013–2020 m. in Kaunas DHN, MW



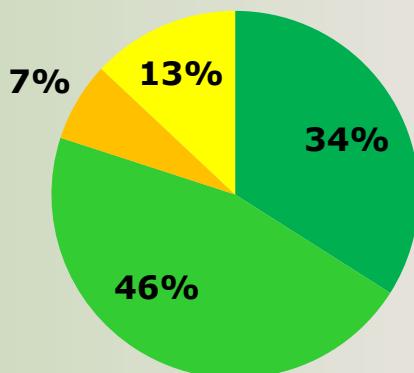
AB Kauno energija: 72 MW + 20 MW IHP

# FUEL FOR HEAT PRODUCTION

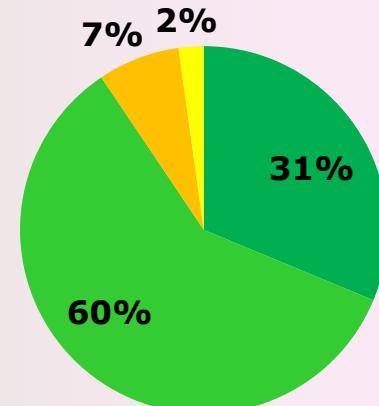
2015 m.



2016 m.



2017 m.



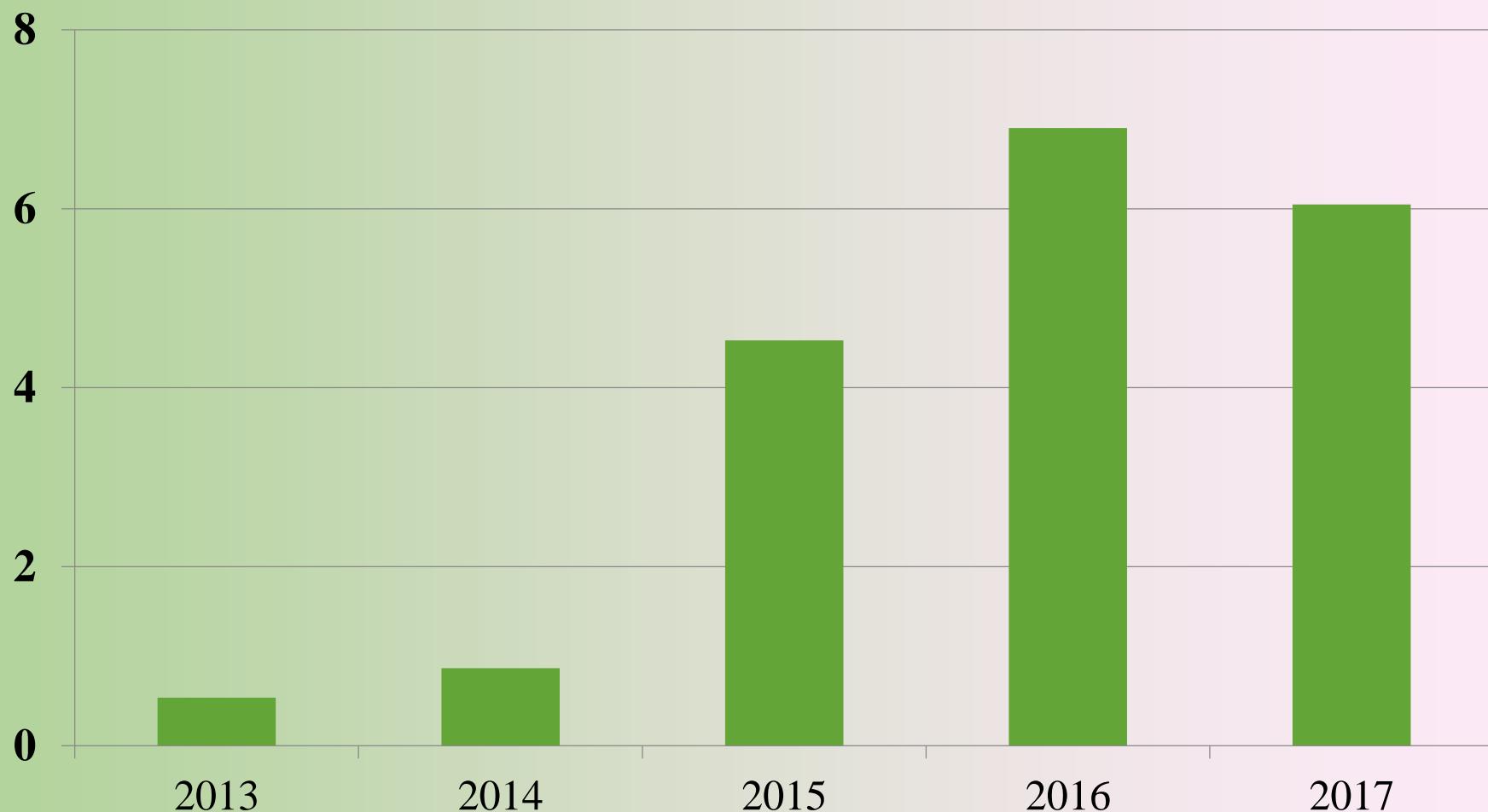
KE biokuras      NŠG biokuras  
KE gamtinės dujos      NŠG gamtinės dujos

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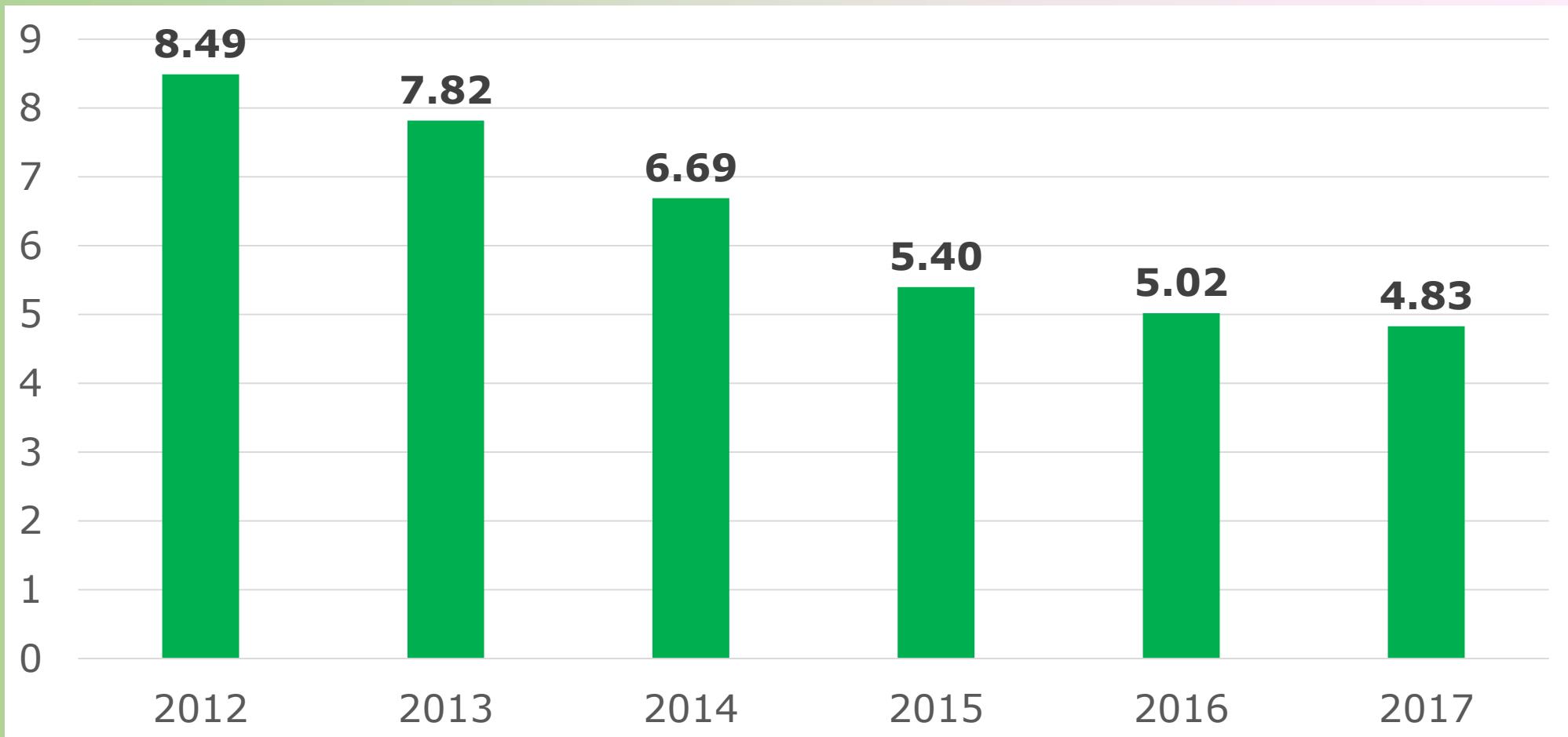
KE biokuras      NŠG biokuras  
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2017: consumption natural gas - 9 %

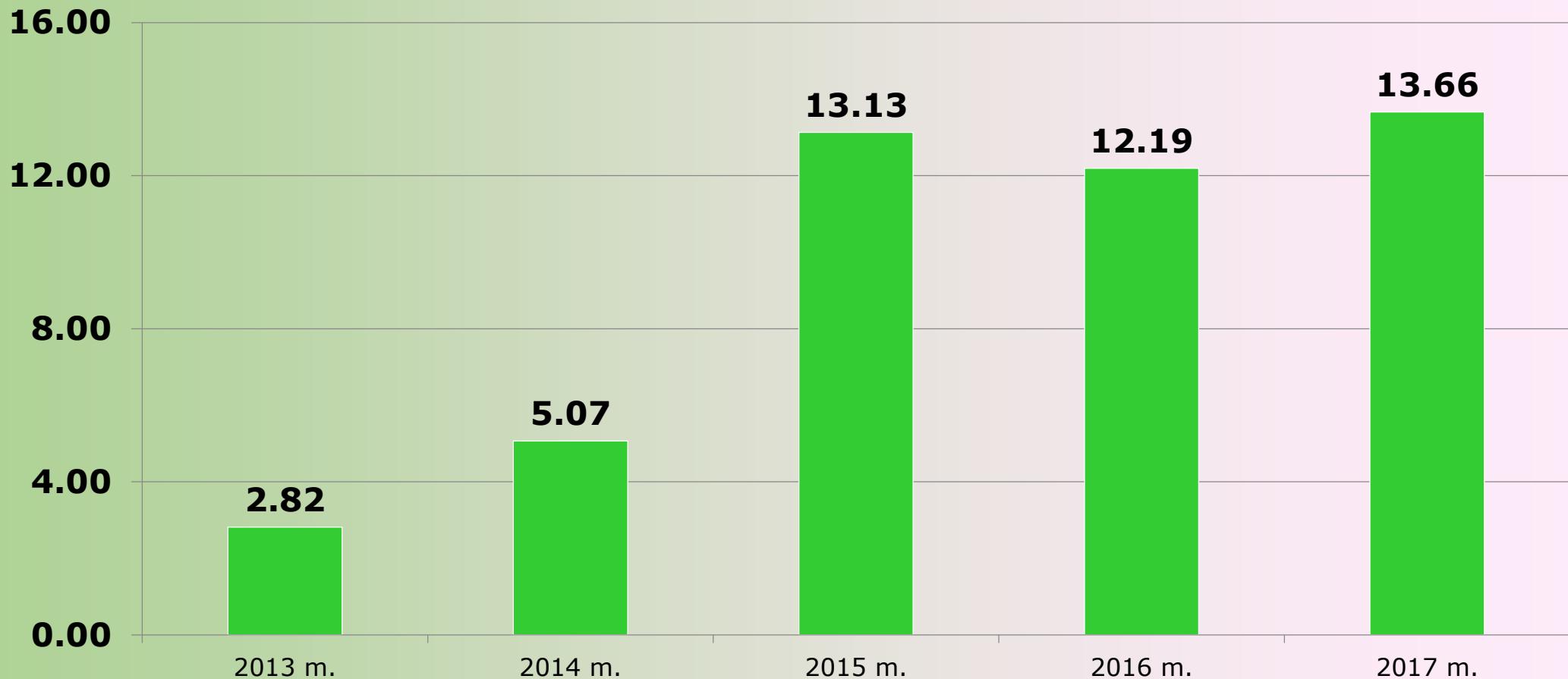
# **AB „Kauno energija“ profit, mln. Eur**



# PRICE OF HEAT 2012 – 2017, ct/kWh



# **Connected new heat consumers, MW**



# Some new Project and Ideas for developing in future



Stage of Feasibility Assesment



## Study and Realization of new ideas:

- Big Data from across the grid and driving real time analytics to optimize network functionality and efficiency
- Producing user – realization of small demo
- Smart microgrid/grid:
  - innovation to meet the demands of changing supply
  - balancing and integrating the latest technological developments

## Participation in internation projects:

- READY (Resource efficient cities implementing advanced smart city solutions),
- FLEXCHX (Flexible combined production of power, heat and transport fuels from renewable energy sources)



*Thank You for attention*