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ELECTRICITY FROM PEAT – ABANDONED PLANS FOR A POLISH PEAT-FUELLED PLANT IN WIZNA: FACTS AND CONTEXTS

When at the end of the 1940 s assumptions for the "Six Year Plan for economic development and building the foundations of socialism for 1950–1955" were prepared, it was acknowledged that the peat deposits at the meeting point of the Narew and Biebrza rivers were the most important natural wealth of the Białystok region. Peat was to become one of the bases for the industrialization, and its most spectacular stage was to be the construction of the first peat-fuelled electricity power station (chemical-energy complex) in Poland in Wizna[1].

Peat as a Source of Energy

Peat-bogs have been exploited for many centuries. Experts refer to peat as "young coal", as it is formed in the first stage of lignite formation, and later, hard coal. Peat is one of the types of coals which are mined, although it contains the least of the carbon element (anthracite contains the most, followed by hard coal and lignite). It is a sedimentary rock with a carbon content of under 60 percent, most often used as fuel. However, its value as a fuel in extreme cases is almost twice lower than anthracite. Nevertheless, it is worth noting that peat is also used as a building material in poorer regions[2].

Peat is now rarely used to generate energy, but such electrical power stations still function in Finland, Russia, Ireland and Canada (the latter has 40 percent of the world's peat deposits). However, peat is not always the only fuel in them – very

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1 A. Szyszkowska, *Województwo białostockie*, Czytelnik, Warszawa 1951, p. 6–8.

2 G. Ozaist, *Energia z torfowiska*, „Polska Energia" 2012, no. 7, p. 5.

often it is only a minor share. This is true of the Shatura (Russia) electricity power station where peat constitutes approx. 10 percent of fuel (the electricity power station has a 1200 MW capacity). Peat is of more importance in the power and thermal station in Kirov (approx. 300 MW). Russia has a total of 11 operational electricity power stations and a few electrical heat and power plants fuelled by peat. In the USSR there were considerably more of them, almost 80 in fact. In Canada the peat-fuelled installations are not large and are scattered geographically (power under 10 MW). They produce heat in addition to electricity. In Finland peat began to be used to generate energy in the 1920 s. The largest power stations using this fuel are Toppila 1 (267 MW)[3], Toppila 2 (315 MW), Keljonlahti (209 MW)[4] and Seinajoki. The peat-fuelled power stations in Ireland are relatively young – West Offaly (150 MW) and Lough Ree (100 MW). They started functioning in the 21st century Together with the remaining peat-fuelled power stations they cover approx. 6.5 percent of the Irish demand for electricity[5].

In Poland, peat first began to be used as fuel in the 18th c. However, for many centuries it had had a very limited use, in practice it was limited to households using deposits from their own resources or those to be found in the vicinity. In the twenty years between the wars peat was indicated as one of the raw material resources, basing on which the construction of new local power stations[6] was promoted (with a tax relief incentive). However, it must be stressed that peat was not considered to be a primary fuel. At the beginning of the 1930 s Kazimierz Straszewski, the creator of several Polish power stations who served several terms in office as the president of the Polish Electricians Association, wrote "Because of the location of the majority of Polish peat-bogs at a distance from centres of demand for energy, peat will not play an important part in energy generation. Some peat-bogs may be of interest to local plants in the recent Eastern Borderlands"[7]. In reality, it was more complicated. At the end of the 1930 s Poland still had some peat-bogs which had not been prospected (just as with lignite)[8]. It was estimated that the largest seams were in Polesie near Horodno (15 000 ha) and in the Wilno region near Kiena (11 700 ha). It was calculated

3 Peat constitutes 85 percent of fuel, and the rest is wood.

4 Peat and woody biomass.

5 G. Ozaist, *Energia z torfowiska*…, op. cit., p. 5.

6 Rozporządzenie Prezydenta Rzeczypospolitej z dnia 27 października 1933 r. o popieraniu elektryfikacji, Dziennik Ustaw 1933, no. 85, item 633; Obwieszczenie Ministra Przemysłu i Handlu z dnia 30 czerwca 1934 r. w sprawie trybu postępowania w zakresie korzystania z ulg przewidzianych w rozporządzeniu Prezydenta Rzeczypospolitej z dnia 27 października 1933 roku o popieraniu elektryfikacji, Monitor Polski 1934, no. 159, item 208. K. Straszewski, *Rzut oka na elektryfikację Polski*, „Przegląd Techniczny" 1933, no. 8, p. 197.

7 K. Straszewski, *Rzut oka na elektryfikację Polski*…, op. cit., p. 198.

8 M. Altenberg, *Gospodarka elektryczna*, Lwowski Oddział Stowarzyszenia Elektryków Polskich, Lwów 1936, p. 12.

that these two sources could keep the electricity power stations operational for 100 years and with this energy power the whole of Volhynia, Polesie, Nowogródek voivodships and the southern part of Wilno voivodship. The peat-bogs of Pulwa (situated on the fork of the Bug and Narew rivers) near Warsaw were also noted. They were acknowledged to be of strategic significance, in particular "in the event that the capital was cut off from the coal basin it could prove invaluable"[9]. However, these plans were never implemented.

Peat Bog Experiment

However, the concept reappeared after the end of the war. Electrification was to become one of the flagship projects of the new authorities. This applied to both individual customers and the compulsory planned industrialization. Most certainly in part it was connected also with Soviet experiences[10]. Therefore, work began on a concept to prepare for the construction of the first Polish peat-fuelled electricity power station. In 1947 two possible locations were identified, Krowie Bagno near Włodawa and the Wizna[11] area.

The tests, in which experts from the USSR took part, were carried out on the aforementioned peat-bogs. In December 1948 a plenipotentiary for the Minister for Industry and Trade for Peat Management convened a conference devoted to the use of both peat-bogs. It was, in its own way, a type of summary of the state of research to date, taking into account activities undertaken in 1947. The minutes of the meeting state that as a result of the renewed discussion conducted a high professional level, the following theories may be established. It was ascertained that both locations had areas which were suitable for industrial and agricultural exploitation. In the first case, the construction of "chemical and power complexes" was indeed most appropriate. It was further recorded that "electricity generated using local peat will be readily consumed by local industry, the expansion of which is foreseen in the plan for the nation's economic development". It was also proposed that at the same time the preparation of the terrain for agricultural activity should be made possible

[9] Ibidem, p. 13.

[10] In 1931 it was estimated that the third part of energy produced in the USSR came from peat-fuelled electricity power stations. Ibidem, p. 13.

[11] J. Gajda, H. Ćwintal, K. Panasiuk, *Zmiany warunków gospodarowania na zmeliorowanym torfowisku na przykładzie „Krowiego Bagna"*, „Wiadomości Melioracyjne i Łąkarskie" 2012, no. 3, p. 122.

(also in areas where the peat was to be extracted for the electricity power station)[12]. According to certain information, the opinion issued after the tests in 1947 was unequivocally negative as regards the construction of the aforementioned complex. The inadequate volume of peat was said to be the impediment[13].

The circumstances in which Wizna was chosen as the ultimate location for the investment are not altogether clear. We can only surmise that the deciding factor was the plans regarding industrialization of the Białystok region. Deposits of peat around Wizna were situated almost at the centre of the future "triangle to be industrialized" in the region (set out below).

Power Station in Wizna

The Białystok voivodship had the most extensive peat deposits. It was estimated that they totalled 231 683.5 ha. Compared with other voivodships, it was 220 231.1 ha (Bydgoszcz), 150 564.65 ha (Lublin). For the whole of Poland the figure was 1 497 267.12 ha. The deposits in the Białystok voivodship were to be found in 1349 peat-bogs. However, in the Białystok voivodship there were a few high peat-bogs, i.e. the most sought after for electricity generation, totalling an estimated 613 ha.[14] approx. The most important peat-bog in this area was near Wizna.

The first substantial tests in this area did not take place until the second half of the 1940 s. Thus, they were deposits which had been fairly well examined and researched. Therefore, as already mentioned, the Wizna peat bog near Krowie Bagno was said to be the only one in Poland which the state sector could utilize[15].

The Wizna peat-bogs at that time extended over 11.5 thousand ha. A part, approx. 7 thousand ha., was already in use as fields. The remainder was sporadically used as pasture land or a place where people collected peat for fuel. The Wizna Basin is the most southerly protruding part of the post-glacial stream valley of the Biebrza. There was a single peat-bog there of 9750 ha separated by 1–2.5-kilometre meadow-lands

[12] Konferencja w sprawie wykorzystania przemysłowego i rolniczego torfowisk „Wizna" i „Krowie bagno", „Gospodarka Wodna" 1949, no. 1–2, p. 34.

[13] J. Gajda, H. Ćwintal, K. Panasiuk, *Zmiany warunków gospodarowania na zmeliorowanym torfowisku*…, op. cit., p. 122.

[14] F. Szczepański, *Złoża torfu w Polsce*, „Przegląd Geograficzny" 1957, vol. XXIX/4, pp. 779–781, 783, 785.

[15] Ibidem, pp. 779–781, 783, 785.

from the dried up Narew river bed. It was estimated that the seams of peat went down to a depth of almost 7 metres[16].

Most of the peat-bogs were in private hands. Over 74 percent of the Wizna peat bogs were in the hands of peasants. The authorities gradually limited individual ownership and at the end of the 1960 s it constituted only approx. 45 percent[17]. In administrative tems, the area belonged to the Łomża county, and since the changes introduced in 1954, to the Zambrów county (approx. 9 thousand ha) and to the Łomża county (approx. 2.5 thousand ha).

Even if negative opinions actually appeared about the peat-fuelled electricity power station in Poland, they were disregarded and planning work continued. On 2 September 1949, a conference was held in the State Economic Planning Committee regarding definition of the direction for the use of peat in the "Six Year Plan for economic development and building socialist foundations for the years 1950–1955", which was being prepared. It was one of several dozens of conferences of this nature, although judging by the modest length of the summing-up report, the matter did not arouse any great interest. Only some catchwords were discussed regarding the production of insulation sheets, using peat ("awareness grew for the need for more effective advertisement to locate a greater than current amount on the domestic market"), promoting peat as fuel ("possibly expand the campaign in order to prevent the use of firewood for fuel")[18]. The only real problem recorded in the document is the Wizna matter. It is noticeable, however, that those taking part in the debate were very sceptical about the idea of investment in Wizna. "Because of any possible future construction of an industrial complex in this region, small sums had to be donated for research and preparation of the area. The level of amounts in the plan should be taken as a correct estimation. Caution should be exercised in expenditure – investing only when the problem has been precisely examined and has a 100 percent chance of implementation."[19]. It is not clear, however, whether this refers to just the electricity power station or the entire concept of industrialization on the fork of the Biebrza and Narew rivers. The scepticism of the participants in the debate was certainly not unconnected with the results of the aforementioned research. Nevertheless, it

[16] K. Niewiński, *Wpływ zagospodarowania Bagna Wizna na indywidualne gospodarstwa rolne*, „Wiadomości Melioracyjne i Łąkarskie" 1969, no. 11, p. 321; S. Żurek, *Geneza zabagnienia pradoliny Biebrzy*, PAN IGiPZ, Warszawa 1975, pp. 57–58.

[17] K. Niewiński, *Wpływ zagospodarowania Bagna Wizna na indywidualne gospodarstwa rolne*…, op. cit., p. 322.

[18] Archiwum Akt Nowych (henceforth AAN), Państwowa Komisja Planowania Gospodarczego (henceforth: PKPG) 3563, Protokół z konferencji odbytej w sprawie przyjęcia planu 6-letniego „Torf Polski" w PKPG w dniu 2 września 1949 r., p. 179.

[19] Ibidem, p. 179.

is worth adding that another equally scant report regarding energy matters made no mention of the electricity power station at all[20].

The decision to include the investment in Wizna in the Six-Year Plan (although it seems that not everyone was convinced of its aptness) was ultimately taken in October 1949. The statement of the committee compiling the draft document read "As a result of the discussion a decision was taken to incorporate the construction of the peat-fuelled electricity power station in Wizna in the Six-Year Plan, and as it was necessary to work through the issue more precisely, a sum of 1.4 billion zł should be set aside for this investment". All investments relating to peat were planned for the sum of 2.2 billion zł [21].

In time, it became clear that the peat investment in Wizna was becoming less and less realistic. Therefore, the official format of the Six Year Plan made a diplomatic reference to it. The ultimate version of the Act stated "In order to cater for growing needs in industry, electric traction and the requirements of residents in towns and villages, in 1955 we should produce 2.3 times the amount electricity than in 1949 […] The construction of the first peat-fuelled electricity power station in Poland in Wizna (the Białystok voivodship) will go ahead"[22].

Contexts

Why was the pressure exerted for the construction after all? The electricity power station in Wizna was essential for at least two reasons. The first was the program for the electrification of the Białystok region. Improvement of the electricity supply was one of the key problems for the voivodship. In 1947 electrification of a minimum of 15 villages was planned, and a maximum of 25, subsequently. Agnieszka Brzostek describing the Białystok Voivodeship National Council summed up the problem of electrification of Białostocczyzna as follows "In implementing these intentions »difficulties were encountered due to lack of materials, and in particular copper. Farmers bore 80% of the costs, and the Zjednoczenie Energetyczne (the Power Association) the remaining 20%«. The Chairman of the National Council in Białystok, Witold Wenclik, noted

[20] AAN, PKPG 3563, Protokół z konferencji w sprawie zatwierdzenia planu 6-letniego dla C.Z. Energetyki. Konferencja odbyła się w dniu 17 września 1949 r., p. 139.

[21] AAN, PKPG 737, Protokół nr 3 z posiedzenia Komisji Wstępnej Redakcji Planu 6-letniego, odbytego w dn. 6 października 1949 r. p. 3.

[22] Ustawa z dnia 21 lipca 1950 r. o 6-letnim planie rozwoju gospodarczego i budowy podstaw socjalizmu na lata 1950–1955, Dziennik Ustaw 1950, no. 37, item 344.

that there was a wide disproportion between the electrification of villages in Białystok voivodship, and villages in other voivodships. So, for example in 1948 1200 villages were to be connected up to an electricity supply, out of which in Białystok region there were only 25. This was also because of loans, which were designated for this purpose. To provide an electricity supply to Białystok voivodship in 1948 1.6% of all loans designated for power were allocated, in 1947 1.3%, and in 1948 only 0.97%. So the process of connecting up to an electricity supply in a Białystok village took decidedly longer and was on a smaller scale than in other voivodeships"[23]. Despite this, in 1950 the following towns and housing estates were still without electricity: Choroszcz, Brańsk, Ciechanowiec, Goniądz, Jedwabne, Nowogród, Wizna, Tykocin, Kleszczele, Suraż, Narew, Kuźnia, Dąbrowa, Lipsk, Boćki, Szepietowo, Czyżew. There was an inadequate supply in Siemiatycze, Drohiczyn and Suchowola. Only 118 villages in Białostocczyzna had an electricity supply. The Six-Year Plan for the Białystok voivodeship foresaw electrification of 825 villages. The problem was becoming more serious. The director of the Economic Section of the Voivodeship Committee of Polish United Workers Party (PZPR) in Białystok, Stanisław Juchnicki, just before autumn 1950, warned that "in the autumn-winter period of 1951 we will be facing a serious electricity shortage. The electricity power station which is to be built according to the Six-Year Plan on the peat-bogs in Wizna even in 1951 would not have satisfied the energy demands of Białystok voivodship, which in 1955, will total approx. 48 000 kw. whereas the electricity power station which is to be built on the peat bogs if Wizna is to be a 25 megawatts power station."[24].

The second reason was rather more serious, relating to the industrialization program for the voivodeship. The intention was to "construct a strong industrial centre whilst retaining the agricultural and animal rearing characteristics" in the Białystok region, strive to harness and prepare it for exploitation of peat deposits, clay and gravel and create conditions for improved use of regional tourist values[25]. The Six-Year Plan states that "the Białystok voivodship, as a non-industrialized part of the country, must be assured marked development of its manufacturing capacity and in particular: construction of cotton plants in Białystok, Łomża and Zambrów[26], oil

[23] A. Brzostek, *Przyczynek do działalności Wojewódzkiej Rady Narodowej w Białymstoku w latach 1944–1950*, „Studia Podlaskie" 2005, vol. XV, pp. 196–197.

[24] AAN, Komitet Centralny Polskiej Zjednoczonej Partii Robotniczej (henceforth: KC PZPR) 237/VII-385, Protokół nr 34/50 z posiedzenia Egzekutywy KW PZPR w Białymstoku z dnia 29 sierpnia 1950 roku, p. 191.

[25] Anna Szyszkowska, *Województwo białostockie*…, op. cit., p. 2.

[26] See also: A. Zawistowski, *Zambrów – losy miasta i kombinatu. Przyczynek do dziejów nieudanej rozbudowy Białostockiego Okręgu Przemysłowego*, [in:] *Stare okręgi przemysłowe. Dylematy industrializacji i dezindustrializacji*, W. Morawski, A. Zawistowski (Eds.), SGH, Warszawa 2008, pp. 39–41.

and soap plants and a tannery in the Białystok area, a sugar factory in the Suwałki and Augustów areas and 28 other more heavy and medium industry plants; increase the value of socialist industrial production to exceed the volume five-fold and increase the employment level in industry by over 40 thousand persons"[27].

Comments were made at various party meetings about the aims of the Six-Year Plan in the Białystok region, such as "During the 6 year plan our voivodship will have several dozens of industrial plants built […]. We will no longer be a "backwater". We will become a cultural voivodeship. A socialist one. A People's Poland – building socialism – will get rid of the remnants from the times of Polish and German fascist rule on our land once and for all"[28]. "Having regard to the guidelines the Congress of United PZPR [sic!] substantial sums will be invested in the Białystok voivodeship, which will help to reduce the gap which has arisen, because of government-imposed sanation, in the development of political, economic and cultural life in relation to eastern and central voivodeships"[29]. However, industrialization was to be a priority, service facilities were to follow later[30].

The Six-Year Plan in the Białystockie voivodship foresaw the development of three branches of industry: textiles (continuing the old industrial traditions and using the local skilled workforce, working on the basis of local raw materials and those imported from the USSR), metallurgy (construction of machinery for the local agricultural market and industry) and agricultural industry. An analysis of the raw material resources indicated that the industry which was being commenced in the Białystok region could be based on the following raw materials: plants (linen, wool, tobacco, potatoes, sugar beet, sugar, wood), animals (meat, fish, skins), minerals (peat, clay, stones, gravel, lime).

Most importantly, in the first stage, the intention was to concentrate on the "triangle of industrialization", marked out by Białystok, Ełk and Łomża[31]. These towns (together with Grajewo) were to become, according to the assumptions of the Six

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27 Ustawa z dnia 21 lipca 1950 r. ….

28 AAN, KC PZPR, 237/VII-376, Protokół z narady wojewódzkiego aktywu PZPR, Rezolucja, 25 II 1950 r., pp. 33–34.

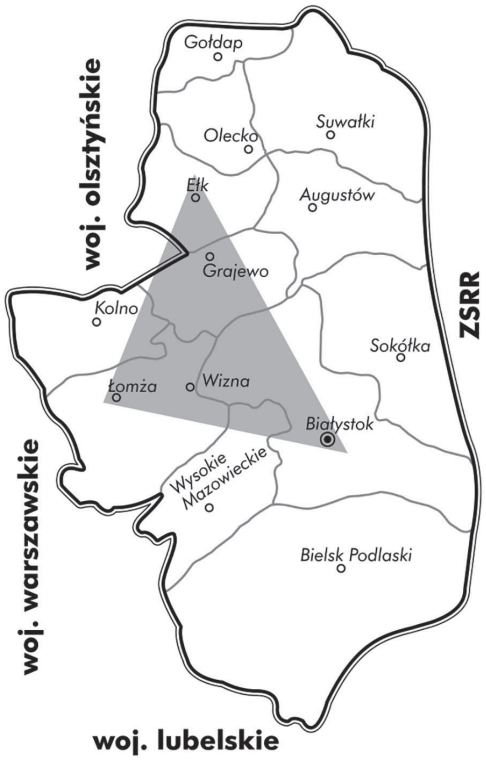
29 AAN, KC PZPR, 237/VII-384, Uchwała Egzekutywy KW PZPR w Białymstoku w sprawie pracy organizacji partyjnych i realizacji inwestycji, [1950 r.], p. 153.

30 AAN, KC PZPR, 237/VII-376, Protokół z narady wojewódzkiego aktywu PZPR, Referat sprawozdawczy z V Plenum KC Partii z omówieniem planu sześcioletniego województwa białostockiego, 25 II 1950 r., pp. 35–87.

31 Ełk and Łomża were to become voivodeship towns in the future. Although Ełk's position was not questioned, Łomża competed for this function with Ostrołęka (the possibilities were examined: Łomża and Ciechanów or only Ostrołęka). AAN, PKPG, 6462, Elaborat Departamentu Planów Regionalnych i Lokalizacji określający metodę opracowania wytycznych do planu 6-letniego w sprawie planu zagospodarowania miast, pp. 27–29; AAN, PKPG, 6462, Lista miast, dla których opracowano wskazania i liczby kierunkowe dla planów zagospodarowania, pp. 89–91.

Year Plan, the main industrial centres of the voivodeship, impacting smaller places and interrelated with them. What was of importance was the fact that at the centre of this "triangle of industrialization" there was to be a new electricity power station.

Map 1. The planned electricity power station in Wizna against the background of the "triangle of industrialization" (according to the administrative division of 1950)



Source: A. Zawistowski, *Kombinat. Dzieje Zambrowskich Zakładów Przemysłu Bawełnianego – wielkiej inwestycji planu sześcioletniego*, IPN, Warszawa–Białystok 2009.

The industrial centre in the capital of the voivodship was to have an impact on and activate the Bielski and Sokólski counties. In Białystok the intention was to build new cotton plants, finish the rettery, precision tools factory, textile machinery factory, oil and soap plant, brewery, gasworks, bacon plant, poultry farm, dairy, and other smaller plants, based on agriculture and forestry[32]. Initially, also the construction of a light

[32] A. Szyszkowska, *Województwo białostockie*…., op. cit., p. 30–31, 32, 57–62; AAN, PKPG, 3564, Protokół z konferencji w sprawie planu 6-letniego gazownictwa w dn. 8 VI.1949 r. o godz. 10, k. 51–57, 63–71, 72–80.

industry plant in Gródek was planned; however, in 1949 the plans were dropped[33]. Łomża was to become the most important industrial centre after Białystok, connected with Zambrów and Wizna and with the Kolno and Wysokie Mazowieckie counties[34]. The plan for Łomża included construction of a rettery, a meat plant and smaller agricultural industry plants, and near the town, textile plants (Piątnica, situated on the other bank of the Narew, was mentioned there)[35]. Textile plants were also to be established in Zambrów. There were plans to open the third industrial centre in the "municipal complex" of Ełk–Grajewo, which was to have good rail and road links and a network link to larger settlements. There were plans to build a rettery, metal factory for the local industry, mechanical workshops, agriculture and the agricultural and wood industry[36].

Agriculture in the "triangle of industrialization", once irrigation of fields near the Biebrza and Narew had been conducted, was to prepare itself for "an intensive animal rearing economy as a provisions basis for city residents". There were plans to create State Agricultural Farms at least on part of this agricultural terrain[37]. They were to be in the vicinity of the new electricity power station.

Undesired Investment

As already mentioned, the Six Year Plan included the construction of an electricity power plant, however, with a certain amount of leeway, so that commencement of construction could be deferred. Actually, problems with the investment in Wizna occurred just a few days after the formal approval of the Act on the Six-Year Plan in July 1950. At the end of the executive meeting of the Voivodeship Committee of PZPR in Białystok in August 1950, Karol Białkowski (the Director of the Power Industry Association of Białystok Voivodeship) stated that "the electricity power station in Wizna would be built, but not in 1951, as it had been taken off the plan."[38]

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33 AAN, PKPG 3563, Notatka z konferencji w sprawie przyjęcia 6-letniego planu Centralnego Zarządu Przemysłu Bawełnianego, która odbyła się dnia 13 września 1949 r. w Państwowej Komisji Planowania Gospodarczego w obecności ministra przemysłu lekkiego ob. Stawińskiego, pp. 226–227, 292–293.

34 A. Szyszkowska, *Województwo białostockie*…, op. cit., p. 31.

35 AAN, KC PZPR, 237/VII/372 Wydział Organizacyjny, Komitet Wojewódzki Białystok, Materiały Komitetów Powiatowych i Komitetów Miejskich, Sprawozdanie Komitetu Powiatowego na konferencję wyborczą w dniu 16 IV 1950 r. za okres do dnia 5 III [19]50 r., pp. 82–105.

36 A. Szyszkowska, *Województwo białostockie*…, op. cit., p. 32.

37 Ibidem, pp. 31, 37.

38 AAN, KC PZPR 237/VII- 385, Protokół nr 34/50 z posiedzenia KW PZPR w Białymstoku 29 VIII 1950, k. 190.

In the years 1951–1952 the government in the amended assumptions of the Six Year Plan abandoned many investments, most often in the areas which were poorly industrialized or not industrialized at all. It was the Białystok voivodeship which lost out the most then (as many as 67 projects were cancelled here, in other voivodeships, Lubelskie and Krakowskie, only 21 in each). Unfortunately, the documents confirming the hypothesis that in taking this action only the costs restriction aspect was taken into account, and not paying much regard to all other criteria of the Six-Year Plan into the background, have not been found. One cannot also rule out that it was only by sheer chance that these decisions were taken. All investments in Łomża were scrapped – a town which needed a complete reconstruction[39]. Work was not started on the construction of the power and heating plant in Dzikie Fasty, a light concrete manufacturing plant in Grajewo[40]. In the end, the construction of the electricity power plant in Wizna was postponed from 1951 to a later date[41], and subsequently it was taken off the Six-Year Plan[42].

This was, however, not the end of the building plan in Wizna. In later years works began on the preparation of the assumptions for the next economic plan extending over several years (for the years 1956–1960). At that time investments were anticipated including in the valley of the upper Narew and Biebrza. Again, they were about to work out a concept for use of peat from the area of Wiznafor the energy industry. Plants built in previous years and new investments were to benefit from this. In Białystok a textile machinery factory was to be constructed employing 1.5 thousand people and a factory manufacturing boilers and turbines (4 thousand people). Besides Ełk and Białystok, Łomża, Sokółka and Suwałki were considered for

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39 T. Mrzygłód, *Polityka rozmieszczenia przemysłu w Polsce 1946–1948*, KiW, Warszawa 1962, pp. 61–62, 63, 61–63.

40 R. Horodeński, *Przemysł*, [in:] *Białostockie,* M. Gnatowski (Ed.), PWN, Warszawa 1969, p. 111. The heads of the voivodeship considered that cancelling many investments in Białostocczyzna was due to particular discouragement, attributed to this region in the capital. "That's how it's been labelled, the Białystok voivodeship is like a "Cinderella", that it's proper place is in last position, that it is alright to neglect it in Warsaw, but in the Białystok voivodeship itself it is seriously neglected" stated Antoni Alster, the director of the Organizational Department of KC PZPR (AAN, KC PZPR, 237/VII-381, Protokół z III Plenum Komitetu Wojewódzkiego PZPR w Białymstoku, 9 XI 1953, k. 223).

41 AAN, KC PZPR, 237/VII-385, Protokół nr 34/50 z posiedzenia Egzekutywy KW PZPR w Białymstoku, 29 VIII 1950 r., k. 190.

42 R. Horodeński, Z. Podemski, *Pozarolnicza działalność produkcyjna w woj. białostockim. Główne kierunki i cechy rozwoju*, [in:] *Województwo białostockie w XXX-leciu Polski Ludowej. Wybrane problemy społeczno-ekonomiczne*, M. Gnatowski (Ed.), „Ośrodek Badań Naukowych w Białymstoku. Rozprawy i Monografie" 1974, no 1., p. 178–179; AAN, PKPG, 3563, Notatka z konferencji w sprawie przyjęcia planu 6-letniego „Torf Polski" w Państwowej Komisji Planowania Gospodarczego, 2 IX 1949 r., p. 320; AAN, PKPG 6364 Lokalizacja nowych zakładów w planie 6-letnim. Materiały do planu lokalizacji nowych zakładów w planie 6-letnim, p. 300; AAN, PKPG 6364 Lokalizacja nowych zakładów w planie 6-letnim. Materiały do planu lokalizacji nowych zakładów w planie 6-letnim, Według nowych zakładów w planie 6-cioletnim wg centralnych zarządów, p. 230.

development. Preliminary assumptions of the 5 Year Plan for 1956–1960 assumed that in the Białystok voivodeship rettery, linen, woollen, flour, oil industry, distillation, potato, dairy, fruit and vegetable, chemical, wood industries would be developed[43]. There were plans to build a sugar factory (deleted from the Six-Year Plan) and a potato processing plant, machinery and agricultural equipment factory and plants for the construction industry materials[44].

The location of these investments was, above all, to comply with the principle of industrialization and development of centres reviving neglected areas which included Ełk, around which a commercial area was to be created. It would seem that these decisions were all part of the concept of creating a voivodeship with Ełk as the capital. There were plans, therefore, to start a leather collective in the town and glass manufacturing plants (partly also connected with Grajewo)[45]. It is these plants which the electricity power station in Wizna was to supply. The fiasco of the Six-Year Plan, and then the amendments to the assumptions for the next 5 Year Plan ultimately put an end to the experiment with the first Polish peat-fuelled electricity power station.

The "General spatial management plan for the peat-bog area in Wizna" an assignment in 1963 received from the Presiding Board of the Voivodeship National Council in Białystok marked its symbolic ultimate end. At that point it was acknowledged that the "main direction of management of that area assumed would be permanent grassland"[46]. Thus, instead of the Chemical and Power Complex, the State Grassland collective was established[47].

Epilogue

In 1967 peat reserves at Wizna Marshlands I and Wizna Marshlands II were created to protect the low-lying peat bogs which were classed as containing rare plants[48]. As

[43] AAN, PKPG 6471, Przebudowa rozmieszczenia sił wytwórczych i urządzeń usługowych w Polsce w latach 1956–1960, Województwo białostockie, pp. 77–79.

[44] AAN, PKPG 6471, Opinia do wstępnych wytycznych zagospodarowania przestrzennego woj. białostockiego w planie pięcioletnim 1956–1960, Prezydium WRN 31. I1953, p. 201.

[45] AAN, PKPG 6471, Przebudowa rozmieszczenia sił wytwórczych i urządzeń usługowych w Polsce w latach 1956–1960, Województwo białostockie, p. 8, 19, 35, 77–79.

[46] K. Niewiński, *Wpływ zagospodarowania Bagna Wizna na indywidualne gospodarstwa rolne*, „Wiadomości Melioracyjne i Łąkarskie" 1969, no. 11, p. 321.

[47] W. Michaluk, *Znaczenie melioracji w 25-leciu rolnictwa białostockiego*, „Wiadomości Melioracyjne i Łąkarskie" 1969, no. 7, p. 224.

[48] *Informacja Podlaskiego Wojewódzkiego Inspektora Ochrony Środowiska w Białymstoku o stanie środowiska na terenie powiatu zambrowskiego w 2012 r.*, Voivodeship Environmental Protection Inspectorate

stated in the Order of the Minister for Forestry and Wood Industry "The reservation is created to preserve for scientific and didactic purposes fragments of the low-lying peat bogs with the classification of rare plants such as musk orchid […], pedicuaris sceptrum carolinum […]), betula humilis […] and sali lapponum […] 3. The following are prohibited in the reserve a) change of water relations without a permit required by the Water Law Act, issued by the competent body for water management, the Presiding Board of the National Council in consultation with the competent body for nature preservation matters, the Presiding Board of the Voivodeship National Council; the water relations in the reserve may only be altered if they do not cause significant changes in the biotopes; b) cutting down trees and bushes, c) picking medicinal herbs and other plants or parts of plants, d) obtaining peat and other fossil fuels, e) obtaining grassland and grazing farm animals, f) hunting, capturing, startling and killing animals living in the wild and destroying nests and taking eggs, g) polluting the land and lighting fires, h) erecting or building communication installations and other technical installations, j) staying in the reservation outside areas designated by the nature conservation officer"[49].

However, if an electricity power station had been to be built instead of the protected areas – how would this have changed the region? The cost of the energy obtained from the peat-fired electricity power station in Wizna remains an open question. Could the investment have brought in realistic profits? In the conditions of a centrally steered economy such costs are difficult to assess because of the model of the economy. However, there are reliable attempts of such an analysis from the beginning of the 21st c. In Finland, which uses peat as fuel in electricity power stations, according to the figures for January 2008, the estimated cost of generating energy from a peat-fuelled power station is almost the highest, although it is a level similar to that of hard coal. The cost of generating a megawatt hour is 65.5 euro, whilst a wood-fuelled electricity power station function – 73.6 euro, coal – 64.4 euro, gas – 59.2 euro and nuclear fuel – is 35 euro[50]. It would seem, therefore, that the country and region today derives a greater benefit by retaining the natural environment than if it were using a peat-fuelled electricity power station.

in Białystok Representation in Łomża, Łomża 2013, p. 5.

[49] Zarządzenie Ministra Leśnictwa i Przemysłu Drzewnego z dnia 23 listopada 1967 r. w sprawie uznania za rezerwat przyrody, Monitor Polski 1967, no. 66, item 320.

[50] A. Strupczewski, *Aspekty ekonomiczne rozwoju energetyki jądrowej*, „Energetyka Cieplna i Zawodowa" 2009, no. 11, p. 9.

Bibliography

Altenberg M., *Gospodarka elektryczna*, Lwowski Oddział Stowarzyszenia Elektryków Polskich, Lwów 1936.

Archiwum Akt Nowych w Warszawie. Zespoły: Państwowa Komisja Planowania Gospodarczego; Komitet Centralny Polskiej Zjednoczonej Partii Robotniczej.

Brzostek A., *Przyczynek do działalności Wojewódzkiej Rady Narodowej w Białymstoku w latach 1944–1950*, „Studia Podlaskie" 2005, vol. XV.

Gajda J., Ćwintal H., Panasiuk K., *Zmiany warunków gospodarowania na zmeliorowanym torfowisku na przykładzie „Krowiego Bagna"*, „Wiadomości Melioracyjne i Łąkarskie" 2012, no. 3.

Horodeński R., Podemski Z., *Pozarolnicza działalność produkcyjna w woj. białostockim. Główne kierunki i cechy rozwoju*, [in:] *Województwo białostockie w XXX-leciu Polski Ludowej. Wybrane problemy społeczno-ekonomiczne,* M. Gnatowski (Ed.), „Ośrodek Badań Naukowych w Białymstoku. Rozprawy i Monografie" 1974, no. 1.

Horodeński R., *Przemysł,* [in:] *Białostockie*, M. Gnatowski (Ed.), PWN, Warszawa 1969.

Informacja Podlaskiego Wojewódzkiego Inspektora Ochrony Środowiska w Białymstoku o stanie środowiska na terenie powiatu zambrowskiego w 2012 roku, Wojewódzki Inspektorat Ochrony Środowiska w Białymstoku Delegatura w Łomży, Łomża 2013, p. 5.

Konferencja w sprawie wykorzystania przemysłowego i rolniczego torfowisk „Wizna" i „Krowie Bagno", „Gospodarka Wodna" 1949, no. 1–2.

Michaluk W., *Znaczenie melioracji w 25-leciu rolnictwa białostockiego*, „Wiadomości Melioracyjne i Łąkarskie" 1969, no. 7.

Mrzygłód T., *Polityka rozmieszczenia przemysłu w Polsce 1946–1948*, KiW, Warszawa 1962.

Niewiński K., *Wpływ zagospodarowania Bagna Wizna na indywidualne gospodarstwa rolne*, „Wiadomości Melioracyjne i Łąkarskie" 1969, no. 11.

Obwieszczenie Ministra Przemysłu i Handlu z dnia 30 czerwca 1934 r. w sprawie trybu postępowania w zakresie korzystania z ulg przewidzianych w rozporządzeniu Prezydenta Rzeczypospolitej z dnia 27 października 1933 roku o popieraniu elektryfikacji, Monitor Polski 1934, no. 159, item 208.

Ozaist G., *Energia z torfowiska*, „Polska Energia" 2012, no. 7.

Rozporządzenie Prezydenta Rzeczypospolitej z dnia 27 października 1933 r. o popieraniu elektryfikacji, Dziennik Ustaw 1933, no. 85, item 633.

Straszewski K., *Rzut oka na elektryfikację Polski*, „Przegląd Techniczny" 1933, no. 8.

Strupczewski A., *Aspekty ekonomiczne rozwoju energetyki jądrowej*, „Energetyka Cieplna i Zawodowa" 2009, no. 11, p. 9.

Szczepański F., *Złoża torfu w Polsce*, „Przegląd Geograficzny" 1957, vol. XXIX, issue 4.

Szyszkowska A., *Województwo białostockie*, Czytelnik, Warszawa 1951.

Ustawa z dnia 21 lipca 1950 r. o 6-letnim planie rozwoju gospodarczego i budowy podstaw socjalizmu na lata 1950–1955, Dziennik Ustaw 1950, no. 37, item 344.

Zarządzenie Ministra Leśnictwa i Przemysłu Drzewnego z dnia 23 listopada 1967 r. w sprawie uznania za rezerwat przyrody, Monitor Polski 1967, no. 66, item 320.

Zawistowski A., *Zambrów – losy miasta i kombinatu. Przyczynek do dziejów nieudanej rozbudowy Białostockiego Okręgu Przemysłowego*, [in:] *Stare okręgi przemysłowe. Dylematy industrializacji i dezindustrializacji*, W. Morawski, A. Zawistowski (Eds.), SGH, Warszawa 2008.

Żurek S., *Geneza zabagnienia pradoliny Biebrzy*, PAN IGiPZ, Warszawa 1975.

Electricity from Peat – Abandoned Plans for a Polish Peat-Fuelled Plant in Wizna: Facts and Contexts

The final article explores little-known plans for the use of peat in energy production in Poland. The idea of building a plant in Wizna is shown as part of a wider concept of industrialising rural parts of the country within the Białystok-Łomża-Ełk triangle. Repeatedly postponed, the concept never came to fruition, and was finally abandoned after the creation of peat nature reserves in 1967.

Keywords: Poland 1945–1989, 6-Year Plan, peat, energy generation.

Électricité de la tourbe – plans abandonnés de la centrale de tourbe polonaise à Wizna. Faits et contextes

L'article explore des plans peu connus pour l'utilisation de la tourbe dans la production d'énergie en Pologne. L'idée de construire une usine à Wizna est presentée comme la partie d'un concept plus large qui concerne l'industrialisation des régions rurales du pays dans le triangle Białystok-Łomża-Ełk. Ce concept est **ajourné** à plusieurs reprises, alors il ne s'est jamais concrétisé et finalement a été abandonné après la création de réserves naturelles de tourbe en 1967.

Mots-clés: Pologne 1945–1989, un plan de six ans, tourbe, production d'énergie.

Электричество из торфа – заброшенные планы строительства польского торфяного завода в Визне. Факты и контексты

В последней статье рассматриваются малоизвестные планы использования торфа в качестве топлива в Польше. Идея строительства завода в Визне указана как часть более широкой концепции индустриализации сельских районов страны в треугольнике Белосток-Ломжа-Элк. Многократно откладываемая концепция никогда не воплотилось в жизнь и стала окончательно заброшенной после создания торфяных заповедников в 1967 году.

Ключевые слова: Польша 1945–1989, 6-летний план, торф, производство энергии.